APR 5 1926

PAPER TRADE JOURNAL

PAPER
Is Combined with Paper Trade Journal

Vol. LXXXII, No. 13 APRIL 1, 1926 Per annum, $4.00 Per copy, 10 cents

Daily Newsprint Production on Walmsley Machines

2700 TONS

The daily production of newsprint on Walmsley machines by the end of 1926 in Canada and Newfoundland will be 2700 tons.

It is a striking tribute to the quality of our machines that nearly 50% of the total newsprint production of these two countries should be made on Walmsley machines.

Here is a list of the machines installed and on order:

Abitibi P. & P. Co.	3	The E. B. Eddy Co.	1
Anglo Newfoundland Co.	2	Newfoundland P. & P. Co.	4
Bathurst Co.	2	Powell River Co.	2
Belgo Paper Co.	4	Price Bros. & Co.	9
Donnacona Paper Co.	1	Wayagamack News, Ltd.	2

Of these fifteen have been installed within three years and five are on order

We are prepared to take care of your requirements promptly

Charles Walmsley & Co. (CANADA) LIMITED

Works: Longueuil, Que.

Office: Montreal, Que.

Entered as second class matter August 13, 1925, at the Post Office at East Stroudsburg, Pa., under Act of Congress of March 3, 1879 — ESTABLISHED 1872 — FIFTY-FOURTH YEAR — Published every Thursday by the Lockwood Trade Journal Company, at 54 North Crystal St., East Stroudsburg, Pa.
EXECUTIVE AND EDITORIAL OFFICES: 10 EAST 39th STREET, NEW YORK CITY CHICAGO: 123 West Madison, Chicago, Ill.

The dominant vacuum pump for paper mill service

Nothing more convincingly affirms the preference for Nash Hytor Vacuum Pumps for removing condensation and air from flat boxes, felts, wires, rolls and similar machinery than the few following facts—

Over 600 mills are Nash Hytor users. Of these, many are operating as many as 20 and 30 Nash Pumps. One large company alone is using 130 Hytors! Mills in which Nash equipment is installed make over 81% of the country's total production of paper!

We are proud of this record. It proves the unquestionable supremacy of Nash Pumps for paper and pulp mill service.

NASH ENGINEERING COMPANY

So. Norwalk Connecticut

New England Representative Mr. G. H. Gleason, Nottingham Bldg., Copley Square, Boston, Mass.

Western Representative Mr. T. H. Savery, Jr., 1504 Republic Bldg., Chicago, Illinois.

Nash Hytor

VACUUM PUMPS AND COMPRESSORS

Some Interesting Facts Concerning the Noble & Wood Pulping Engine

The following are a few of the results which have been determined by actual test:

Domestic Kraft pulp laps, 45% dry, fed into 1200 lb. pulper through chute from overhead, treated for beaters and dumped within ten minutes. On thoroughly dry foreign Kraft, total time elapsed was 21 minutes.

On straight wood pulp furnish, 80% groundwood, 20% sulphite, a 1200 lb. engine thoroughly pulped the stock, ready for jordans, in 20 to 30 minutes.

Many other equally good records are available upon request.

Our booklet "CUTTING PRODUCTION COSTS WITH THE PAPER PULPING ENGINE" carries a full history of the development of the pulper. Write for a copy.

THE NOBLE & WOOD MACHINE CO., Hoosick Falls, N. Y.

ESTABLISHED IN 1872

PAPER TRADE JOURNAL

With Which Is Combined

Vol. LXXXII, No. 13 — PAPER — Thursday, April 1, 1926

The Magazine of the Paper Industry

Superintendents Plan Big Meeting At Detroit

Unusual Program Is Being Prepared For The Seventh Annual Convention of the American Pulp and Paper Mill Superintendents' Association To Be Held June 3-5 at the Book Cadillac Hotel—Board Section Will Meet at Monroe Where Opportunity Will Be Given to Visit Mills

The Convention Committee for the Seventh Annual National Convention of the American Pulp and Paper Mill Superintendents' Association, which will be held in Detroit, Mich., on June 3-4-5 at the Book Cadillac Hotel, have already arranged a tentative program according to W. F. McGraw, Chairman of the Committee.

According to Mr. McGraw the Hon. John W. Smith, Mayor of Detroit, will welcome personally the visiting superintendents at the convention and it is expected that either Governor Groesbeck of Michigan, or Senator Couzens will address the Convention at the annual banquet, which is to be held on Thursday evening, June 3.

"A comprehensive program is being arranged for the three day meeting," Mr. McGraw said, "beginning with the address of welcome by E. T. A. Coughlin, president of the American Pulp and Paper Mill Superintendents' Association on Thursday morning, to be followed by business sessions on Thursday, Friday and Saturday mornings, and special opportunities to visit the paper mills and the big industrial plants in Detroit, during the Convention. At the divisional meetings of the Association including the paper and writing, chemical pulp and board sections, practical problems involved in the manufacture of paper and pulp will be discussed by the superintendents. The paper and writing, and the chemical pulp sections will meet at the Book Cadillac Hotel and the Board Section will be held at Monroe, Mich., where special opportunity will be given to the board superintendents to visit the mills at Monroe.

"Beside the addresses during the banquet which will be broadcast over station WCX located at the Book Cadillac Hotel there will be a special program of entertainment of singing and vaudeville. In addition to the banquet on Thursday night, there will be another banquet on Friday night when a special entertainment will be arranged and luncheons will be served on Friday and Saturday.

"A special program is being arranged for the ladies who will attend the Convention including shopping trips, luncheons at the Detroit Yacht Club, special sight-seeing tours of Detroit, a visit to the Ford plant and a theatre party. The ladies will be present at the banquet on Thursday night and also at the joint luncheon and program on Saturday."

In addition to William F. McGraw, who is the general chairman of the Arrangement Committee for the Seventh Annual National Convention of the American Pulp and Paper Mill Superintendents' Association, the personnel of the committees are as follows:—

Henry Bert, honorary chairman.

Finance—W. R. Brown, chairman.

Arrangements—H. J. Pauli, chairman; Theo. Dunn, Emil A. Mitchell, L. N. Austin, L. H. Breyfogle, Alfred E. Bryant, W. M. Carroll, Elmer E. East, Frank B. Eilers.

Registration—Geo. H. Pountain, chairman; C. A. Tifft, F. J. Rooney, O. V. Yates, G. S. Martindale, M. J. Guild, A. G. Stone, H. W. Stanley, Alfred E. Bryant, Wm. H. Sievert. (These men are the secretaries of our various divisions.)

Transportation—J. P. Cooney, chairman; Vern Hotelling, C. G. McClellan, Jacob Parent, Fred A. Smith, Martin Mulder, Donald McDonald, M. Redmond, C. C. Thorne.

Reception—Wm. H. Sievert, chairman; V. V. Troyer, E. F. Yahnke, E. H. Gilman, C. L. Harter, W. H. Wightman, Geo. W. Gilkey, E. A. Hibbard, Otto W. Fisher.

Visitation—Jacob Kuss, chairman; John E. Daley, E. F. Sheahan, S. V. Burrows, T. E. Roe, Walter B. Mitchell, Bernard Benson, Wm. Y. Gilkey, Max Oberdorfer.

Resolution—Peter J. Massey, chairman. The chairman of each division is a member of this committee: Homer C. Ferguson, James G. Ramsey, Wm. Brydges, Henry Bert, R. H. Laftman, Geo. H. Pountain, Carl Magnus, K. E. Terry, Joseph H. Slauer, Chas. N. Mooney.

Gillette Fibre Mills To Build

[FROM OUR REGULAR CORRESPONDENT]

STILLWATER, N. Y., March 27, 1926.—The Gillette Fibre Mills, Inc., which began operations here recently in part of the Wood-Flong Corporation mill in South Main Street, has had plans prepared for the immediate construction of a new concrete building 100 x 30 feet. The contract has been awarded to Collins Bros. of this village and work is already under way. The building will adjoin the plant of the Wood-Flong Corp. and will be used as a beater room. New beaters and other machinery have been ordered by the Gillette Corporation and will be installed immediately upon the completion of the building. It is expected that the beater room will be in operation by the early part of May and this will result in the employment of a larger working force.

Quebec to Prohibit Hydroelectric Power Export

Measure Passed Without Division by Legislative Assembly of Province—International Paper Co. and the Fraser Co. to Erect News Print Plants in New Brunswick—Four Principal Groups Now Handling Canadian News Print Output of 4,800 Tons Daily

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., March 29, 1926.—The Legislative Assembly of Quebec has passed without a division the Bill prohibiting the export of hydroelectric power from the Province. Premier Tarcherean, in speaking on the third reading of the Bill, said it had been claimed that if hydroelectric power was exported on lease it would always be easy to get it back, but he asked what would happen if part of New York, Boston, or some other large American city were lighted by power produced in this Province, or even if their carlines were operated by that same power, and Quebec tried to take that power away from them?

Five Sections of Bill

The Bill has five clauses which are worthy of attention. They are:

"Section 1. Every sale, lease, or grant whatsoever of water powers belonging to the province, or in which it has rights of ownership or other rights, made on or after the coming into force of this act, shall contain a clause prohibiting the exportation, outside of Canada, of the electric power which may be developed in this province.

"2. Every contract, permit or grant authorizing, from and after the same date, the installation or passage of transmission lines, in or over the Crown domain, shall likewise contain a similar prohibitive clause.

"3. Every authorization given by the Quebec Public Service Commission, under the acts concerning it, shall be subordinated and subject to the prohibition enacted by the above sections 1 and 2.

"4. Every violation of the provisions of this act shall render null and void, at the demand of the Crown, any sale, grant or contract, any lease or permit, made or granted by it.

"5. The provisions of this act shall apply:

"(a) To the existing contracts, unless reported to the Minister of Lands and Forests within three months after the coming into force of this act; and

"(b) To any renewal of such contracts at the expiration of the term for which they were made."

Huge Development Planned in New Brunswick

Premier Baxter, speaking in the New Brunswick Legislature, announced that arrangements were being entered into under which the International Paper Company would develop Grand Falls, on the St. John river, the most potential natural water power in Canada east of Niagara, upon a policy such as that which had carried Quebec along so prosperously in the march of industrial development. Under the terms of the agreement, he said, the Fraser Company are to erect a 200-ton news print plant, and the International Paper Company, a plant of similar capacity, which could later be expanded.

Progress of News Print Control

The production of news print is rapidly coming under central control in Canada. The lead in this direction was given some years ago by the formation of the Canadian Export Paper Company, and various companies have since been combined under three other big groups, namely the Holt group of companies, the George H. Mead Company, and the International Paper Company. The first-named handles the export sales of Laurentide, Price Bros., and Brompton, with a total daily production of 1,200 tons. The Holt group includes the St. Maurice Valley Corporation, Port Alfred, Canada Paper, and the St. Maurice Sales Corporation, which sells also the output of the St. Lawrence Paper Mills and the Beaver Wood Fibre Company, these companies having a daily output of 900 tons, shortly to be largely increased. The George H. Mead Company handles the export sales of the Abitibi and Spanish River Companies, with a total output of 1,200 tons daily; and the International Paper Company handles that of its own mills, amounting to about 1,500 tons daily. In other words, of the total daily production of 5,700 tons in Canada, these four news print groups handle 4,800 tons. Of the remainder some 350 tons is manufactured in Canada by American papers for their own use.

Export of Pulpwood

Canada exported pulpwood to the value of $14,168,935 in 1925. In answer to a question in the House of Commons recently it was stated that pulpwood worth this sum had gone out of the Dominion last year. Of this Quebec sent the most, or $7,069,375; Ontario exported $4,203,302; New Brunswick, $1,526,032; Nova Scotia, $1,091,399; British Columbia, $204,521, and Manitoba, $74,306.

Saguenay Pulp and Paper Company

The former bondholders of the Saguenay Pulp and Paper Company have now received share certificates for preferred and common stock of the Quebec Pulp and Paper Company, and therefore now become joint owners of assets in which they collectively possess a three-quarters interest.

The president, A. S. McNichols, has also addressed a letter to shareholders of the Quebec Pulp and Paper Mills, Ltd., in which he says: "The company owns three large groundwood pulp mills, two of which are located at Chicoutimi on the Chicoutimi River and one at Val-Jalbert on Ouiatchouan river. All three are substantial buildings of Laurentide granite. They have an annual output capacity of 145,000 tons. The plant also comprises an efficiently equipped machine shop and foundry installed in a fireproof building of granite and steel construction.

"Special transportation and shipping facilities are provided by ownership through stock control of tidewater docks and equipment at Port Alfred and a railroad which operates 40 miles of main line.

"Included in the assets is a modern hydroelectric generating plant with its own transmission lines located on Chicoutimi river, at Port Arnaud. From the Ouiatchouan Falls at Val-Jalbert, another plant generates and distributes power for various purposes. The total power developed is in excess of 37,000 h.p. of which 28,500 is hydraulic and 8,500 hydroelectric practically all used for the company's requirements."

The board of directors is now composed of : A. S. McNichols, president; Donat Raymond, vice-president; D. O. L'Esperance, senator; Georges Simard, legislative councilor; Georges Beausoleil, J. H. Boisvert, notary; J. C. Gagne, Rene T. Leclerc, Joseph Versailles and Alex. Prud'homme, K.C., barrister.

Brown Company's Issue

One of the largest single offerings in connection with the development of the pulp and paper industry has been announced here during the week. It consists of $20,000,000 of 5½% 20-year first mortgage bonds of the Brown Company, a subsidiary of the Brown Corporation, which has large mills at La Trique, Que., and in New Hampshire, as well as over 140,000 hp. of undeveloped water power on the St. Maurice river, Quebec. The total net income of the Brown Company and the Brown Corporation for the past ten years has averaged $3,692,000 annually, or over 3.3 times the annual interest charge of $1,100,000 on the funded debt which will presently be outstanding.

MATHIESON Chemicals

Our Complete Chlorine Service

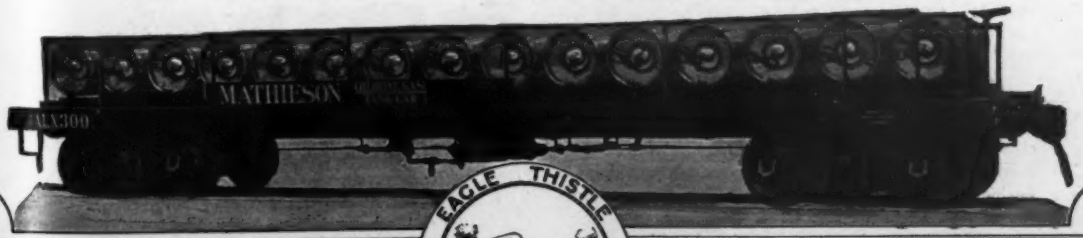
A DECISION of far-reaching benefit to the chlorine industry was the final ruling of the Interstate Commerce Commission on the Mathieson Multiple-Unit Tank Car.

This ruling has placed the Multiple-Unit Car permanently on a tank-car basis and has thus made available to manufacturers of Liquid Chlorine and other liquefied gases a flexible and economical means of maintaining shipping and storage reserves. It will permit the general extension of our practice of accurate weighing and frequent inspection which has proven so advantageous to the consumer; it assures the carriers of two methods of transporting liquefied gases in tank cars which may be expected to increase this traffic; and it has made liquefied chlorine gas available to the consumer in containers of four sizes, according to his requirements.

To-day the Mathieson Company owns and operates 120 of the special tank-cars required for transporting Liquid Chlorine, 75 of the multiple-unit type and 45 of the Class V or single-unit type, in addition to its equipment of many thousands of the two sizes of chlorine cylinders.

We thus offer, by reason of the Company's foresight and present resources, a complete service on Liquid Chlorine adapted to the consumer's varying needs and to all conditions of supply and demand.

The **MATHIESON ALKALI WORKS** *Inc.*
250 PARK AVE. NEW YORK CITY
PHILADELPHIA CHICAGO PROVIDENCE CHARLOTTE



EAGLE THISTLE PRODUCTS

Deal Direct with the Manufacturer

Caustic Soda - Liquid Chlorine
Bicarbonate of Soda
Anhydrous Ammonia
Soda Ash - Bleaching Powder
Modified Virginia Soda
Aqua Ammonia

Demand for Paper in Philadelphia Broadens

Distribution Accelerated by Approach of Easter and Early Spring Activities of Various Industries Allied to the Paper Trade—With the Elimination of Many Disturbing Factors, the Paper Business is Gradually Becoming More Stabilized

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., March 29, 1926.—As the Easter holiday approaches, its demands and those of the early springtime mercantile industries, add zest to the paper distribution of the Quaker City. The principal grades of papers in demand just at the moment are those needed for the Pascal season from the numerous lines of coarse wrappings and specialties or containers, and in the fine paper division, social and writing papers and those needed by the engraving and greeting card manufacturing trades. The general spring requirements for the various industries that are particularly active at this time help to broaden the distribution, which will, no doubt, assume greater proportions with the coming month when the seasonal activity is at its height. On the whole, paper distribution as it pertains to the local market is in healthier condition than it was at the same time last year and has become more standardized and stabilized with the elimination of many disturbing factors that loomed in the springtime of 1925.

Consumption of Fine Paper Spreads

As the Lenten season wanes, the demand for many grades of social stationery papers assumes larger proportions. High grade card stock announcements and other social stationery grades are now in heavier demand. The advertising trades, too, are consuming more of the specialties used for the announcements of the springtime in the mercantile trades or in the manufacture of catalogues used by the seed and other agricultural supply houses and clothing and like industries now getting ready for the summer season. Printers and publishers continue to confine their orders to small lot sizes of a hand to mouth character.

Coarse Papers in Springtime Markets

While the heavier demand for the Easter specialties needed for the confectionery and food supply trades and the clothing industries just now are the dominating factors of the coarse paper markets, there is evidence of growing demand for all grades of paper for the springtime activities in the numerous industrial enterprises. Clothing boxes and other apparel containers, food wrappings in wax and grease proof grades, fine confectionery and drug wrappings, millinery bags and the general lines of bags used by the grocery supply industries are more active than they have been since the holiday rush. Prices continue to hold to the steadier levels of the past month and show no sign of wavering in the healthier trend of the business world and its needs of the seasonal grades of specialties generally.

Federal Paper Co. Reorganized

With the transfer of the ownership of the Federal Paper Company to B. M. Roseman, the firm is dissolved of the former partnership which for the past five years has governed its business. Ever since the Federal Company entered the Philadelphia distribution trade as general paper dealers handling both fine and coarse grades it has been under the direction of B. M. Roseman and his brother, Philip Roseman. There has just been announced the withdrawal of Philip Roseman from the firm and the sale of his interests in the company to his brother, B. M. Roseman, who will in the future be sole owner of the business at 471 N. 7th street. It is the intention of the new proprietor to develop the business and to add new lines. The firm is now representing the H. W. Nichols Sales Book Company, of Cincinnati, and is negotiating to acquire representation in this territory for other specialties.

Curtis & Bo., Inc., Active in Mills

Ever since the new year set in, the mills of Curtis & Bro., Inc., with Philadelphia offices at 16 S. 5th street, have been speeding up production on its line of specialties in the fine paper grades. The Nonantum Mills of the company are located in Newark, Delaware, and are devoted to the production of high grade specialties for the consumers of fine papers. President Charles Megargee Levis of the firm reports the mills demand so far this year as very gratifying and with every indication of continued demand for the spring months.

J. L. N. Smythe to Celebrate 72nd Anniversary

Easter Monday will be a time for duel celebration in the firm of The J. L. N. Smythe Company, 30-34 S. 6th street, for on that day will be commemorated the 72nd birth anniversary of the president and founder of the company, J. L. Nevill Smythe. Though April 5 will mark the attainment of the 72nd mile stone of life there is very little evidence of the many years that set on the shoulders of the veteran head of the firm. Still actively interested in the business affairs of the company he is daily at his desk holding the guiding reins of the business which he founded back in 1900 after many years of association with the paper industry. The Smythe Company has been built up into the largest of coarse paper distribution houses in the Quaker City trade under the direction of the founder, who has associated with him in the business his son, T. H. B. Smythe, its vice president and secretary, and Harvey E. Platt, its treasurer. It represents some of the leading mills in the country, both in its coarse papers lines and in the numerous specialties for which it enjoys an excellent and widely scattered patronage among the leading manufacturing industries of the city and state.

Collins in Charge of Graphic Arts Exhibit

Andrew J. Collins, formerly assistant advertising manager of the Atlas Portland Cement Company, and recently advertising manager for the Ajax Rubber Company, is now associated with the D. L. Ward Company as advertising manager of the Graphic Arts Division. He succeeds R. D. Fleming, who has been assigned to the sales promotion of the card board lines and the direct mail exhibits and lecture work among the Graphic Arts industries. Manager Collins and Promoter Fleming represented the Ward Company at the meeting of the Sales Managers Club held last Monday at the Bellevue Stratford Hotel. There was featured at this meeting a number of direct mail campaign exhibits of advertising conducted within recent times in the North Garden of the Bellevue Stratford Hotel for the benefit of those attending the meeting. Vice president W. W. Seary, of the Ward Company, who had been vacationing in Bermuda, is again at his desk.

Frank M. Sayford Co. in New Offices

The Philadelphia headquarters of the Frank M. Sayford Company have been removed from the Drexel Building to Room 1007 in the new Public Ledger Building, 6th and Chestnut street, overlooking Independence Square. The Philadelphia offices have been segregated from the Sayford Paper Specialty Company, local headquarters, with which they formerly were connected. The Quaker City offices of the Frank M. Sayford Company, of Brooklyn, N. Y., will be continued under the management of Philip J. McCoy, who for the past eight years has been associated with the company and who also represented the Sayford Paper Specialty Company until the firm decided to discontinue the Philadelphia branch. Manager McCoy will continue to represent the Frank M. Sayford Company lines of lace strips for confections and other articles of like character.

Champion Container Co. Removed

After acquiring a three-year lease on the large manufacturing building at the Northeast corner of Morris and Water streets,

The standard paper screen of the world.
20,000 tons of paper pass through Bird Screens daily.
BIRD MACHINE COMPANY
South Walpole
Massachusetts
BIRD
MACHINERY
Built for the continuous production of uniformly good paper
8704

the Champion Container Company has removed its manufacturing plant to this address from its old location at Green Lane and Smicky streets, in Germantown. The Champion Company, about two years ago, acquired the former plant of the Pennsylvania Paper Products Corporation at the Germantown address and removed to it from its original home at 2021 N. Howard street, combining its business of manufacturing paper cans with that of the Germantown concern. In the new quarters there will be produced the Champion line of paper cans, fiber shipping drums with fiber bodies, tin tops and bottoms and sift proof. These are produced in sizes of from 10 inches in diameter to the larger sizes of 17 inches in diameter and 31 inches high and all answer to the regulation requirements for railroad shipping. It is the intention of the owners, George T. Hynes and Gordon F. Smith to materially increase production in the new home.

Wilcox Walter Furlong Complimented

From the nationally known advertising firm of N. W. Ayer & Son, whose headquarters are located in this city, there has been forwarded to the Wilcox Walter Furlong Company, 17 S. 6th street, a testimonial lauding the quality of the coated papers of the Martin Cantine Company, of Saugerties, New York. The Wilcox Walter Furlong Company is a Quaker City distributor of the Martin Cantine papers, and from the firm was purchased the Cantines-Canfold coated paper used by the Ayer Company in the manufacture of handsomely illustrated portfolios used by the Coral Gables Corporation for the exploitation of the famous Florida resort. The portfolio is a large size colored illustrated 25 page treatise on the Coral Gables Resort. It measures 12 by 19 inches and the papers used are from the mills of the Martin Cantine Company. The Ayer Company, specially prepared a testimonial on the quality of the papers, stating that it was selected because the advertisers required a good coated surface in order to take the four color process plates, and in addition, required a tough fiber stock which would withstand considerable rough handling and usage to which the portfolios of the real estate corporation would be subjected by their representatives all over the nation. This testimonial is now displayed by the paper house and coming as it does from one of the most prominent of the advertising firms in the country, is of value to the distributors of the Cantine products. Several thousand of these portfolios were distributed by the Coral Gables Corporation and are among the most handsome of illustrated advertising matter ever issued by the Ayer company.

Paper House of Penna. Adds New Papers

The Paper House of Pennsylvania, 28 N. 6th street, in its March Bulletin issued during the week, announces the addition to its spring lines of four entirely new papers. They are the Bodleian deckle edge book, made by the Reading Paper Mills, of Reading, Pa.; the Provenworth book papers from the P. H. Glatfelter Company, Spring Grove, Pa.; a new grade of Nordic bond packed in dust proof cartons of 100 lbs. and all standard sizes and weights, and the halftone letter a paper that attains a combination of the writing paper appearance and the quality of bond with the halftone reproducing qualities of coated papers. The latter is to be especially exploited by the Paper House this spring, as a substitute for the old time catalogue.

Grellet Collins Named to C. of C. Committee

President Philip H. Gadsden ,of the Philadelphia Chamber of Commerce has announced the appointment of Grellet Collins, head of the Dill & Collins Co., with headquarters at 112 N. 12th street, and mills in Manayunk and Richmond Districts, to the Foreign Trade Committee of that body.

Papyrus Co. Represented in Quaker City

H. A. Copeland, 1527 Edna street, is now representing the Papyrus Co., of Kenilworth, N. J., near Newark, in the Philadelphia territory, featuring the line of crepe papers and water proof crepe papers manufactured by the Jersey concern.

Sidney Roofing & Paper Co. To Expand

[FROM OUR REGULAR CORRESPONDENT]

VICTORIA, B. C., March 25, 1926.—When the Sidney Roofing and Paper Company gains the consent of the City Council of Victoria to a protective water supply agreement and adequate fire protection, the management will immediately begin the construction of a new $80,000 branch plant for the manufacture of box board or cardboard articles. With all Western Canada as the market place and New Zealand and Australia also bidding for the output of this concern, the officials believe that the industry here will flourish.

The Sidney Roofing and Paper Company started a few years ago in Victoria as a small but promising enterprise. Its name indicates the nature of its business. Building paper of all sorts is its line. It also turns out a paper material used by farmers in protecting their early crops from frost and their summer harvests from excessive heat. And now, with big possibilities looming ahead, the company is planning to manufacture boxes. Being a western center, the Victoria company, which has a branch plant in Vancouver, will be in an excellent position to cater to a wide field in competition with the big eastern houses. More than that, its exports to the Antipodes will be considerable, for it is even more happily situated for this trade.

A new warehouse 120 feet long by 60 feet wide will house the new plant equipment. New machinery, the orders for which will be filled as largely as possible by British Columbia firms, will be installed as soon as the requisite parts are obtained. Then, when the final building construction is completed, more than 30 new hands will be added to the pay roll of the factory. The pay roll has been growing steadily over the past few years and shows every sign of increasing to something even greater.

Tenders for the machinery which is required for the new plant will be invited generally, although the British Columbia and Canadian firms will be given first choice in the case of even tenders. There are some parts, however, which cannot be procured in Canada. The company will thus of necessity call on American factories for this order.

By the addition of the new machinery and changes in the power plant, the new plant will be run on steam power, the output of the entire factory will be nearly doubled in tonnage. The management has optimistically asserted that before long it will plan additions in other directions and that even now it has purchased new land in Vancouver where changes will be made in the branch factory there.

New Process for News Print Recovery

[FROM OUR REGULAR CORRESPONDENT]

ALBANY, N. Y., March 27, 1926.—An announcement of considerable interest to the paper industry was made here this week concerning a successful process for removing the ink from old newspapers that they may be turned back into news print and used again. The process has been evolved by F. H. Rhoades, professor of industrial chemistry at Cornell University. The recovered paper, according to Mr. Rhoades, is just as durable as the original. He said that various cleaning agents for removal of the ink had been tried out and at least two have been found that will make paper as white as the original. One of the chemicals gives a whiter paper, it is said, wiping out some of the coloring matter that was in the printed sheets. The process is said to effect no marked change in the nature of the pulp but there is a loss of about ten per cent in the paper, it was stated.

Safepack Mills Remove Offices to Millis

[FROM OUR REGULAR CORRESPONDENT]

MILLIS, Mass., March 29, 1926.—The Safepack Mills, manufacturers of asphalt slate surfaced shingles, prepared roofings and waterproof building papers have removed their general sales and executive offices to their factory at Millis, where, they state, they will be able to render even better and more efficient service than in the past.

Established 1886
OUR 40TH YEAR

Resources

Are your pulp shipments delayed? We can assist you in such an emergency or in any like contingency. Our pulp resources are being constantly amplified by large shipments in transit and regular deliveries from open European ports.

It will pay you to get our offers on your Wood Pulp needs for prompt or future delivery in both Bleached or Unbleached Sulphite, K r a f t or Groundwood.

WOOD PULP

Of Every Description

M. GOTTESMAN & COMPANY

INCORPORATED

18 East 41st Street
New York, N. Y.
U. S. A.

European Offices:
Kungstradgardsgatan 10,
Stockholm, Sweden.

Demand for Paper Satisfactory in Toronto

Situation Generally Shows Improvement Over Last Year—Suit Started To Set Aside Sale of the Property of the Mattagami Pulp & Paper Co.—Prof. Hibbert Addresses Royal Canadian Institute on "The Importance of Cellulose To Industry"

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ont., March 29, 1926.—The paper market shows no changes and business is moving along in very satisfactory volume. Jobbers report that March has witnessed an increase in most lines over the corresponding month of last year. Payments are a little better and while what is known as "big business" has not developed as yet, the amount of small orders is very welcome and the number is gradually growing. The mills are doing a steady business and the outlook for spring is very good. Manufacturing stationers have been busy for some time and paper box plants are in good shape. Some wholesalers are doing special mail advertising and getting results, and those concerns catering in Eastertide specialty lines report that orders have kept up well. While the paper trade is by no means booming, there is less distrust and discontent than there has been for many months and each week a more hopeful view is taken of the situation.

Mattagami Pulp Co.'s Assets

Sherwood Aldrich is the plaintiff in an action entered at Osgoode Hall, Toronto, against the Mattagami Pulp and Paper Company, whose sulphite pulp plant is located at Smooth Rock Falls, Ont.; the National Trust Company; the Montreal Trust Company; the Royal Securities Company and I. W. Killam, of Montreal. The suit is to set aside a judgment of February 5, 1926, in which the Supreme Court of Ontario in an action in which the National Trust Company was plaintiff and the Mattagami Pulp and Paper Company and the Montreal Trust Company were defendants. The plaintiff in the present action seeks to set aside the sale of the Mattagami property, alleging that the judgment was secured by concealment or perversion of material facts. An accounting is asked. The Court is asked to declare that Mr. Killam occupied a fiduciary relation to the shareholders of the Mattagami Company and that he cannot make a profit on his purchase of bonds and debentures of the company. Any such securities standing in the name of the Royal Securities Company are asked to be declared the property of Mr. Killam. The assets of the Mattagami Company have been advertised to be sold at a judicial sale in Toronto on March 31. If the sale is allowed to go on and, in the event of no higher bid being obtained, it is said that the debentures holders will acquire the property and that they, in turn, will pay off the old bondholders with accrued interest to date. The debenture holders will then transfer the entire assets to a new company and in exchange will receive one $100 share of 7 per cent cumulative preferred stock and one share of common stock without par value for every $100 debenture share which the present company has outstanding. The new company will then issue first mortgage bonds and the proceeds will be used to pay off the bondholders and for other outstanding liabilities.

The Future of Wood Pulp

Harold Hibbert, professor of chemistry in Yale University, who has been temporarily "loaned" to McGill University, Montreal, delivered an interesting address before the Royal Canadian Institute, Toronto, on "The Importance of Cellulose to Industry." He said that recent investigations had shown that purified wood pulp possesses nearly all the properties of cotton. It could be used in the manufacture of artificial silk and leather and sooner or later would undoubtedly compete on an equal basis with real silk and leather. It needed but little imagination to see the stimulus this would give to industry in Canada essentially a wood country. New industries were rapidly springing up for the manufacture of artificial silk; for instance Visco silk at Sherbrooke, Que., and acetate silk at Drummondville, Que. The large factories now being erected at the latter place would add many thousand to the population. Prof. Hibbert added that, after adequate researches and where people really understood all the problems involved, he had no doubt that suitable cellulose material would be secured, not only from spruce but from fir, pine, poplar, and a considerable quantity of Canadian trees now commercially neglected. There was not only a wide field for research in this connection but a new use for Canadian wood, and a considerable increase in the textile industry was to be anticipated.

Rules and Regulations for Safety

There has been drawn up by the Ontario Pulp and Paper Makers Safety Association, of which A. P. Costigane, Toronto, is engineer, certain well defined rules and regulations for the paper and pulp mills of Ontario. These govern yards, wood preparation, acid making, sulphite pulp making, sulphate and soda process bleaching, the ground wood room, pulp shredders and wet machines, machine room, rags and old paper preparation, belts and guard belts, shaftings, couplings, pulleys, gearing, conveyors, electrical equipment, elevators, etc. The rules and regulations have been approved by the Association.

Doing Nice Export Business

The Provincial Paper Mills, Toronto, have shipped to Australia from their Port Arthur plant, where another machine will be added during the present year, six cars of Algoma book paper, which is a repeat order from large publishers. The first shipment was made some time ago. The company is also sending two cars of book paper to the Argentine republic, South America. The mill will concentrate largely on export brands for some time which are produced advantageously owing to the nearness of the raw material at Port Arthur.

Notes and Jottings of the Industry

W. G. Wright, who for several years was with W. V. Dawson, Limited, Montreal, has joined the sales staff of the Don Valley Paper Company, Toronto, and will cover the city and Western Ontario.

George Gray, of the sales staff of the Lincoln Mills, Toronto, is able to be around again after an illness of several weeks.

A deputation from Hastings county waited upon Premier Ferguson, acting Minister of Lands and Forests, during the past week and asked to have a large waste tract of land in the county set aside for the purpose of reforestation.

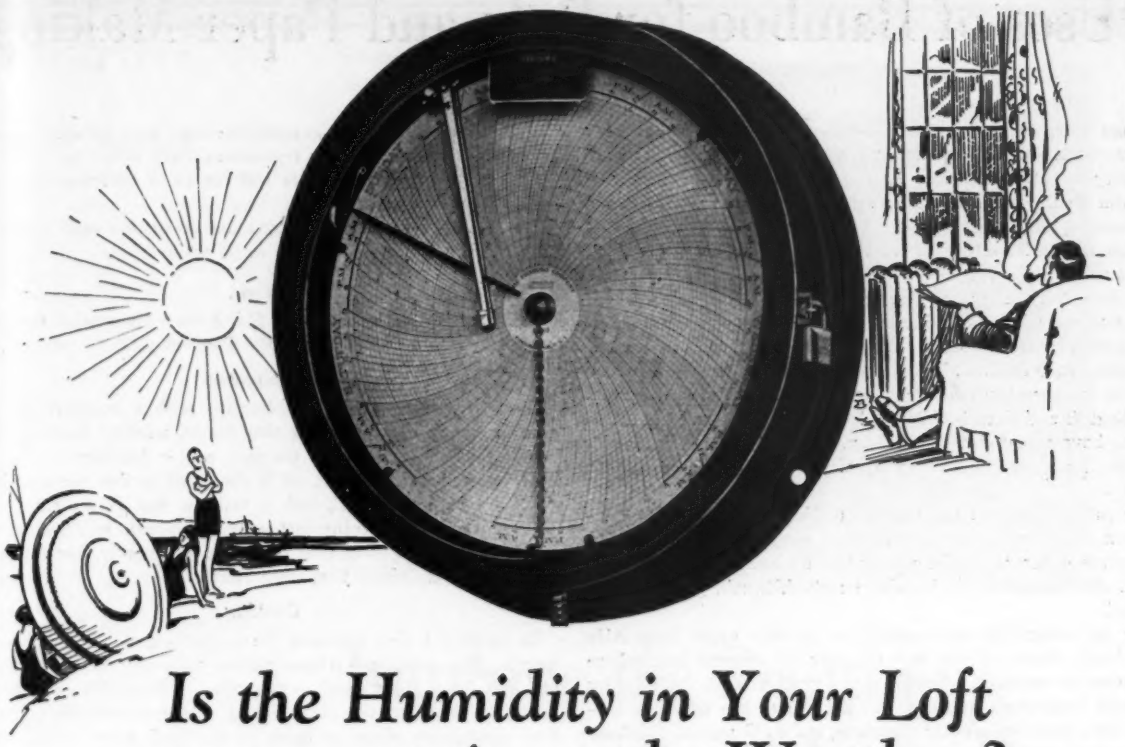
R. A. McInnis, mill manager of the Abitibi Power and Paper Company, Iroquois Falls, Ont., spent a few days in Toronto recently calling upon the trade.

J. Fred Booth, son of the late J. R. Booth of Ottawa, nationally known lumber and paper manufacturer, was in Toronto last week on business.

The next annual convention of the Canadian Paper Box Manufacturers Association will be held at the Mount Royal Hotel, Montreal, on June 28 and 29.

The Provincial Paper Mills, Toronto, have put on the market a new general utility paper known as Bank bond paper, which is for use for all office purposes, is strong and has a good printing surface.

S. F. Duncan and I. H. Weldon of the Provincial Paper Mills, Toronto, were in Montreal during the past week on business.



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THE COMPASS OF INDUSTRY

Uses of Bamboo for Pulp and Paper Making

By J. G. Mayo

From time to time various articles have been published in several trade journals, particularly those in England and France, and very recently another in the *London Times Trade Review*, all of them dealing with bamboos, but only with the vast forests of bamboos in India and Africa.

Many difficulties seem to have been met with the types of bamboos available in those parts of the world, and very little is said about the quality of pulp or paper obtained. It would appear, therefore, that there is a vast difference between these species and the ones available throughout the West Indies, the Carribean coast as far south as the Guianas. Various practical tests made with several types of bamboos from San Domingo, Colombia, Venezuela, Trinidad, English and French Guianas, both from coast and far inland forests, have not varied in the least. The results have invariably been the same, except that one species is easier to prepare than others.

The pulp and paper mills Maracaibo, Venezuela, have, under my direction, been producing a first class wrapping paper, entirely from three different species of bamboo for over two years. Although this particular mill is quite a makeshift, still good paper is obtained.

This particular mill was equipped to produce paper from Alfa grass, but it developed that half the year the swampy land where such grass is available, is impassable. Furthermore, the quantity was quite insufficient, hence it was decided to use whatever materials were available in other directions, mainly Gamelote, Elephant and Japanese grasses, waste papers, imported pulps, etc. However, the paper produced was perhaps the poorest that could be found anywhere.

I therefore turned my attention toward bamboo. It is very prolific anywhere in the parts named above, and I proceeded to make laboratory tests of five kilos, bone dry weight, along the same lines as the English and French chemists, but the results were almost worthless. I then proceeded along practical lines and the very first attempt proved a success, both in the laboratory and in actual practice.

First Paper Produced

The first paper produced entirely from bamboo contained nothing but the bare pulp—no sizing nor filler of any kind—and the samples sent north to ascertain whether our testing machine was correct, gave 120 Mullen test on 15 gram (15 pound) paper. I have never seen any kraft paper made from woods, of similar weight, that gave such results.

Growing Bamboo

In January, 1924, I proceeded to make some experiments toward ascertaining whether bamboo could be produced efficiently and at reasonable costs. Seeds were planted in various ways and several places, and the results were nothing short of astounding. The very first seed produced eighteen stems in as many months. I then proceeded to plant extensively and the very first plantation containing 5,000 seeds has already produced nearly 50,000 stems at a cost of under $2 per metric ton of finished paper. We now have five different plantations, that is, of different ages, all of which exceed all expectations.

The foregoing proves that the location of a pulp mill need have no reference to the supply of raw materials. A little foresight and experience, of course, will enable anyone to locate a mill where transportation facilities are best and, with sufficient land, plant and produce bamboo as many be required.

Results

Although I have fully shown that the costs of raw material (bamboo) per metric ton of finished paper is one-third less than the provincial crown dues in Canada, even if the present costs have equal to those prevailing at mills entering virgin forests, it must be borne in mind that bamboo reproduces itself within two years, and it is always in the same place and can never cost any more, even in fifty years, or more.

It has no bark; stems, branches and leaves are used just as one may see fit, hence there is no waste whatsoever.

Yield

The swampy black spruce, the fibre known (in woods) for paper-making yields about 33 per cent. Bamboo yield 44 per cent.

Equipment

I am preparing (chipping) bamboo with a common rag cutting machine—and everything that comes, whether knots or what not is "cooked", no matter the size, age or hardness.

Here, in this department, all is simplified so that the machinery costs are purely nominal, and, it follows, that future costs, such as repairs, belting, transmission of all kinds, lubrification and all that appertains to moving parts are, also purely nominal, when compared with Wood Preparing plants.

Cooking

In cooking I first followed the methods generally used in the North. But as inland transportation costs are the most abnormal that exist, about equal to the value of the articles themselves, I had to devise means to overcome this extraordinary expense. Fuel alone costs about as much as the total costs of producing plain kraft wrapping paper anywhere in the U. S. A. We pay New York market for fuel oil, and the freight is exactly 100 per cent more. Yet fuel oil is the cheapest thing we can use. If this mill were on the coast, instead of inland, it would be better than either oil or the richest mines existing today.

I have now reduced the alkali consumption to less than 33 per cent of what is required for cooking woods. I use only 60 pound steam pressure, whereas wood calls for 105 pounds, but it has been found that time is the essence of success in the use of bamboo and whereas I have cooked and secured good results with 90 pound pressure at five hours, it seems cheaper to use less steam and give the cooks more time, namely 10 to 12 hours.

The question, however, is whether indirect cooking methods would not give far better results than the direct, or introduction of steam into the digesters. The De Vains system promises a great deal in that direction and my laboratory tests (of 5 kilos) made by the indirect method seems to prove that I am quite right in advocating it.

Various Tests Made

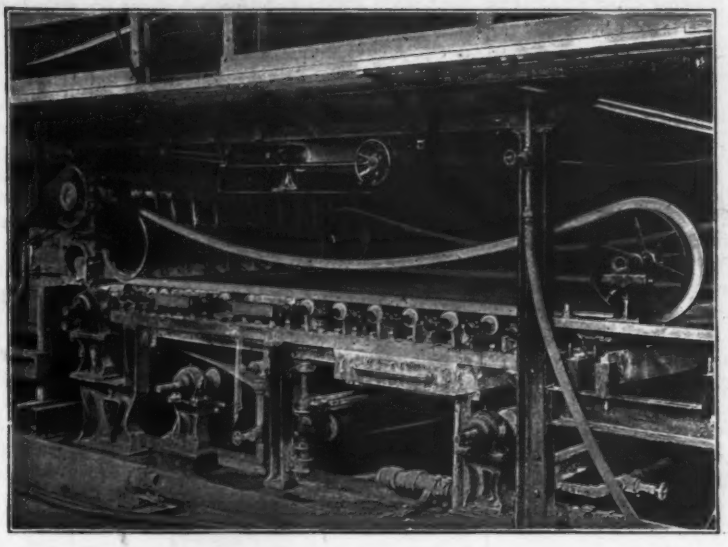
I have made several tests, taking the same bamboo, on the very same day, used in practice, cooked under ordinary circumstances, with 15 per cent caustic, direct cooking, and with 12 per cent caustic and one half the time, in the laboratory digester—indirect cooking method—and the latter was overdone, whereas the former was just about right.

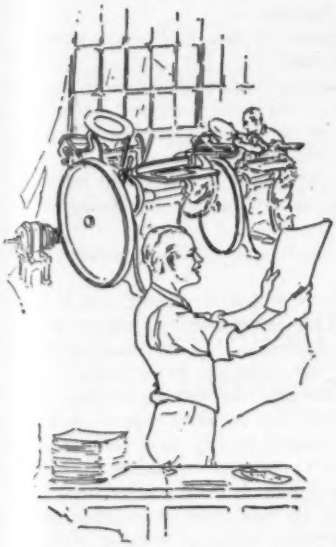
And if De Vains can cook wood with 8 per cent caustic, there is no question but that bamboo, particularly the "Guaguilla" can be cooked with an equal amount if not less.

To demonstrate this would call for a substantial expenditure as well as considerable time. Raw materials would have to be procured on an extensive scale. Some one would have to go to Spain and arrange for the making of practical tests, and this would naturally entail considerable expense. However, the subject is so extensive that it would appear quite worth while.

Preparing Pulp (at Maracay)

Here after the pulp is washed and drained it is sent direct to edge runners (kollergangs), as there is no pulp treating or pre-





Improve *the* Printing Qualities *of* Your Paper

More and more, each year printers are paying closer attention to the printing qualities of the papers they use and the manufacturer cannot disregard this fact. Of course, color has much to do with the printer's choice and this depends greatly on the materials used—their proportions—and the way they are treated before they reach the paper machines.

But surface, formation and lack of variation in thickness are just as important and they are determined by what happens on the paper machine itself. The use of a Voith High Pressure Stock Inlet makes possible a sheet of uniform thickness across the entire width of the machine, and impoves the formation to a remarkable extent. It, also, usually increases production.

The reasons for these improvements and the actual experiences of manufacturers of book, bond, news wrapping and waxed papers are ready for your consideration, as soon as we know that you are interested.

We have ready for you, your copy of an attractive booklet giving full particulars regarding the Voith Inlet and what it is doing for 115 manufacturers, making many different kinds of papers throughout the country.

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paring equipment of any kind whatsoever. Anyone familiar with pulp mills will realize that:

(a) Cooking chips of all sizes, chips made with a rag cutter, and without further treatment, then,

(b) Sending pulp well cooked or raw direct to the refining department is quite an undertaking, but this proves conclusively that,

(c) Bamboo is an article in a class by itself.

Refining

Again I had to overcome the very serious difficulty brought about by the fact that the mill contains no other refining equipment than kollergangs and beaters—two of the former having a capacity of 180 kilos, and three of the latter of 300 kilos although rated at 350 kilos. It is an utter impossibility to handle that amount.

One hour or so in the kollergangs and from two to four hours in the beaters produces the paper.

If the same material was well prepared for cooking, properly screened and "crushed," the pulp would be absolutely uniform and there would not be any need of pulp preparing machinery, as these classes of bamboos, including knots and all, cooked very uniformly at all times of the year.

From the beaters the stuff is dumped direct to the machine chest. Sometimes, size is added but generally none at all is used. I have produced paper equal to that used by the National Biscuit Company, in their boxes containing soda crackers by beating seven hours, and without sizing or any filler, and the same could be done easily if refining engines were available, but we have none at all. Hence, the beaters must do all the work and as I have used Southern pines extensively, the difference tetween southern pine and fibers and bamboos means approximately 50 per cent less power to refine the latter.

Paper Machine

At Maracay the paper machine is what is know as a combination fourdrinier and yankee. But here again there is no screening system, with the result that "lumps" frequently appear in the paper. Still, with proper care I manage to produce a clear sheet.

The final ending of the machine however, is typical of those found in all board mills, including the cutter. There is no winder nor rewinder, and the cutter is the best I have ever seen used for wall board. The Waldorf people who have a fine board mill between St. Paul and Minneapolis have an exact copy of this type of cutter which they built themselves.

General

The foregoing will give any experienced paper maker a definite idea of the handicaps I have encountered and regardless of the lack of equipment, I have produced a worthy sheet of paper, and while I have never experienced anything like this in connection with wood pulp, I rather feel that it would be an impossibility to produce paper from any wood fibers under such extraordinary conditions, and fully demonstrates the advantage of Bamboos over woods, at least the types of Bamboos found in these parts of the tropics, for the purpose of producing either soda or sulphate.

Labor

Common labor is paid the equivalent of $1.00 per day, some 80 cents, and the best never more than $1.50 all for 12 hours work, and they generally work seven days each week.

Perhaps the best comparison to make is the machine tenders on similar paper machines as this in the Northern from 80 cents to $1.00 per hour and work only 8 hours per day. Here they earn $11.00 per week and work 12 hours per day and seven days each week.

Further South, so I am informed, common labor is well paid at 40 cents per day, this applies more particularly to the delta of the Orinoco and both English and French Guayanas.

Visible Supplies of Bamboo

Within 20 miles of Maracay thorough investigations have demonstrated that there is enough bamboo, of the three species, namely, the common "buabusa" or female type, the giant, or the male type, and the Güagüilla, which may be better recognized as the "son," because it is also solid as the giant, but not more than an inch in diameter, to produce 20 tons of pulp daily forever. The year old stem is the best, but invariably smaller and shorter than the two year old, when the stem is at its maturity.

Back in the mountains I have encountered immense forests of güagüilla, almost without end, and this type is the best of all that can be found. This and the giant are both solid and practically without any knots. The fibers are practically entirely uniform the entire length of all stems and the paper produced therefrom is the best felting paper I have seen.

Summary

Bamboo, all three species quite familiar to me, will grow anywhere, but like all other plants will reproduce much more rapidly if the seeds are well chosen and the land irrigated, either naturally or artificially, such as may be done by using the waste water from the mills, depending upon location.

My experience, based upon the last 5112 seeds planted, has reduced the loss to 2 per cent.

It has no bark, hence all barking equipment with power and repairs incidental thereto, is dispensed with, and as every part is used just as it comes from the forest or plantation, as the case might be, there is no loss whatsoever.

A man earning 80 cents per day of 10 hours, will cut about as much bamboo in one day as a Canadian lumberjack will cut wood in a week.

No sawing equipment nor storage of winter supply is necessary.

As bamboo reproduces itself within 18 months, and it is more prolific each year, the cost of raw materials is always the same. This is probably the biggest item in its favor, because timber is always further away each year, therefore more costly.

The preparation of bamboo for the making of pulp is more simple than that of preparing rags or waste papers. A stem, no matter what diameter or length, it may have, can be chipped (cut into small pieces) in a common rag cutter. The power saved as well as cost of equipment is quite a large item.

Practical experience based on two years of constant operation with two globe rotary digesters, by direct cooking method has fully demonstrated that bamboo requires 33 per cent less alkali and about one-half the steam required to cook wood of any kind known to me.

Several "cooks" made in a 5-kilo capacity (bone dry weight) digester, by the indirect "cooking" method leads me to believe that less than 10 per cent alkali would be required in actual practice. And in view of the fact that the De Vains process consumes only 8 per cent for cooking woods, it follows that bamboo may be cooked with the same quantity of chemicals.

Here, in the tropics, neither heating nor ventilating machinery is required. Hence the fuel required is dispensed with, as well as maintainance, power, etc. In one Canadian mill the fuel requirements for these purposes amounted to 33 per cent of the total used.

Water from wells of 20 meters in depth is generally 76° F. Water from rivers and lakes is 82° F. It follows that less fuel is required to produce steam.

Various experiments, made in England at my request, have given almost definite assurance that bamboo can be used advantageously, produce (a), pulp and paper, (b), steam and power through gas producing machinery. Dry bamboo calls for 900 grams, and absolutely green bamboo 1400 grams. During the rainy season the latter might prevail, but during the summer months the former, hence an average of 1200 grams, per horse-power, may be considered quite fair.

Buildings in these parts of the tropics need only be shells.

Oxford Paper Company

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Machine Finished and Super Calendered Book,
Lithograph Envelope and Tablet Papers,
Oxford Polar Coated
Oxford North Star Coated
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Roofs and such walls as need not be called upon to support any machinery, may be of asbestos sheething, nothing more.

The mills at Maracay have been in operation for eight years and have never spent a cent towards any equipment for fire protection, nor insurance. This may sound impractical, but there is nothing to burn but the doors and windows.

In actual practice bamboo yields 44 per cent finished paper, whereas woods only yield about 33 per cent, and the final costs of raw materials, for bamboo, are about one-third the costs of Provincial Crown dues, fees, etc., for wood in Canada.

A reasonably safe estimate indicates that it would be quite possible to produce a ton of dry pulp for $25.00, based on 50 tons daily. A 100 ton mill might lower this, after practice, to $20.00. Assuming, however, that the higher figures may prevail, inasmuch as the market price at eastern Atlantic ports for foreign pulps of the type that can be produced, up-to-date, from bamboo, we have:

Manufacturing Costs	$25.00
Existing Freights to New York	10.00
Total	$35.00
Market (1st, 8 months 1925)	$59.00
Net Profit	$24.00

15,000 tons yearly x $24.00 equals $360,000.00

As the U. S. A. imports over 250,000 tons of this class of pulp yearly, and, I am given to understand that both England and France import about the same amount, although this is purely hearsay, it is positive that assured markets are available.

Concessions can be obtained very easily, but this calls for patience and, in some cases, considerable time. At the moment, in the Delta of the Orinoco there is one of 300,000 hectares, and another of some 40,000 hectares both of which contain enormous quantities of various kinds of bamboos as well and high grade timber.

Southern Waxed Paper Co. To Build

ATLANTA, Ga., March 25, 1926.—Addition of another important industrial concern to the growing list of Atlanta's industries is announced by officials of the A. S. Adams-Cates company, who acted as agents in the purchase of a site on Woodrow street and the Atlanta and West Point railroad, to be occupied by a plant for the Central Waxed Paper company, of Chicago.

Construction of the plant will begin immediately, the permit having been issued recently. The property was bought from D. C. Black and others. The new concern, while operated by the parent concern, will be a separate unit and will be known as the Southern Waxed Paper company. It will be directed by H. K. Snyder, who has gained much experience through his years of association with the Chicago concern.

The company will produce waxed paper products, most of which is to be used by bakers. It will employ about 75 operators at the beginning and others will be added at a rapid rate.

The officials of this company have made the following statement with regard to the establishment of this plant in Atlanta:

"To better take care of the requirements of its customers in the southern states, the Central Waxed Paper company is establishing in Atlanta an ultra-modern waxed paper plant.

"The rapid development and expansion of the entire south fully justifies the installation of this plant, the entire equipment of which will be the last word in mechanical perfection. This will assure the users of all grades of waxed paper in the south the highest quality product.

"The Atlanta plant is the latest unit of a number established by the Central Waxed Paper company during the past 10 years to better take care of its rapidly expanding business, which we consider to be a reflection of the confidence and good will placed in us by the baking industry as plants are now owned and operated in Chicago, Ill., Portland, Ore., Oakland and Los Angeles, Calif., and Atlanta, giving a national distribution."

Neenah Paper Co. Builds New Office Building

NEENAH, Wis., March 29, 1926.—The new office building of the Neenah Paper Company marks another step in the growth of this progressive fine paper mill. Organized in 1885, for the manufacture of book papers, the mill was later sold to its present owners and completely revamped and equipped in 1908 for the manufacture of medium and high grade bonds and ledgers. Its original capital stock of $75,000, in 1885, has been increased until at the present time it stands at $1,000,000.

The Neenah Paper Company is a distinct and separate corporation of its own and has no connection whatever with any other company. The mill has grown by the addition of new equipment of the most modern sort until at present its three machines have reached a capacity of thirty tons a day.

The Neenah Paper Company has spent a great deal of time studying the pressroom problems of printers and has made many

NEW OFFICE BUILDING OF NEENAH PAPER CO.

improvements in its manufacturing methods to keep pace with the exacting demands of new automatic appliances in the lithographic and printing fields. It has built up a wide reputation for the excellent working qualities of its papers and their exceptional uniformity. Its Owl marked bonds and ledgers are widely distributed throughout the country, and their growing popularity is the best gauge of their excellent value. Among its well-known mill marks are Old Council Tree Bond, Success Bond, Chieftain Bond, Glacier Bond, Crystallite Bond, Wisdom Bond, Stonewall Ledger, Resolute Ledger and Prestige Ledger.

D. K. Brown is treasurer and general manager of the company and Kimberly Stuart is secretary and assistant manager. The other officers of the company are J. A. Kimberly, president, and J. C. Kimberly, vice-president.

To Change Name To Goulds Pumps Inc.

SENECA FALLS, N. Y., March 29, 1926.—The Goulds Manufacturing Company announces that effective April 1 it will change its corporate name to Goulds Pumps, Inc. The company has sent out the following statement:

"In 1869 when our company was incorporated as the Goulds Manufacturing Company, we built a wide variety of products.

"Today we have one product—Goulds Pumps.

"From a sales and advertising viewpoint, we consider it such a great advantage to link our product with our corporate name, that we have decided to change our name to Goulds Pumps, Incorporated.

"There is no change in organization, business policy or ownership. The board of directors, officers, managers and personnel remain the same."

The E. S. Paper Box Company, Brooklyn, N. Y., has been incorporated with a capital of $10,000, to manufacture paper boxes and containers. The incorporators are E. and L. Momagnano, and D. Kobin. The company is represented by Levinson & Feinsod, 277 Broadway, New York.

The School of Experience

Is a Good Place To Learn

But the Tuition is Expensive

Therefore We Suggest

Order Those Spares and Repairs Now

Ask Us

The Pusey and Jones Company

Wilmington, Delaware

The French Paper Market in 1925

At the beginning of 1925 we find the French paper market in somewhat of a muddle, and the prices of all the raw materials and accessories have resumed an upward trend. The general uneasiness is partly due to the anxiety prevalent in nearly all the countries which were involved in the world war; and the delays in the negotiations for a Franco-German commercial agreement are reflected in the general uncertainty and hesitancy of the commercial and industrial activity of the country. Industry is already beginning to procure the additional labor necessitated by the enforcement of the Eight-Hour-Day Law, as the last delay in its application expires on the 1st of February.

The rise in the price of raw material has been very appreciable in the case of certain grades of rags, and especially as regards old bagging and phormium, which have risen from 25 and 30 francs per 100 kilos to 60, and even 80 francs. This is due to the fact that exporters who ship dark-colored rags to America mix some old bagging and phormium with their rags. We consider this a reprehensible practice, for it is bound to drive American buyers from our dark-colored rags.

Paper and Boards Generally Quiet

At the beginning of February quiet prevails in nearly all the paper and board mills, and even specialty mills suffer from scarcity of orders. Money is scarce and transactions are consequently hard to put through.

The Government has announced its very definite intention to refrain from all inflation to stabilize the French franc; but in spite of restrictions, all the discussions reveal an ever-greater increase in the provisions for expenditures, and the balance sheet issued by the Bank of France in January shows an increase in paper currency of about 340 millions, in addition to the 700 millions advanced to the State.

Customs statistics show the amount of paper imported during 1924. There were 150,000 tons of paper of more than 30 grams per square meter, as compared with 145,000 in 1923. Germany heads the list with over 38,000 tons, followed by Norway with 32,000 tons. These figures explain more eloquently than words the dearth of orders for the French mills at that time.

All the industries are looking to the Government which, despite words of cheer from many talented orators, cannot restore the confidence which is essential to the life of the country. Consequently, there is a slight increase in unemployment, and the index numbers of the cost of living show an appreciable advance. The general index of wholesale prices, which was 370 at the end of January, 1924 (based on 100 in July, 1914), is now up to 525.

Depression Continues

The depression continues into March, and even has a tendency to increase in nearly all lines. The best-established firms are affected by the daily-increasing burden of taxation. But even worse than this is the uncertainty which prevails, and every one fears what the morrow may bring him. Orders shrink still further, and collection becomes rather difficult.

The paper market is adversely affected by the persistent calm which pervades all branches of the national activity. The large departmental stores, the large public administrations, and even the State itself all limit their orders to the very minimum.

A slight resumption of activity is noted in the last few days of the month, and there are hopes that it will continue during the following weeks. Raw materials, particularly rags and waste paper, show a tendency to decline, the former especially as there is very little demand from America for dark-colored rags.

Prices Show Signs of Advancing

The prices of paper, which had been firm for some time back, begin to show signs of rising in the early part of April. Several mills inform their customers that, owing to further increases in transportation rates, increases in wages, and the rigid enforcement of the Eight-Hour-Day Law, they are obliged to increase the price of ordinary grades of paper by about 10 francs a 100 kilos, and that of the better grades by from 15 to 20 francs.

The price of domestic news print is not as high as that of imported news, and quite a few dailies and periodicals, which had till then supplied their requirements from abroad, are turning to the French mills.

Raw materials are easily obtained, and a slight fall is noticeable in the price of rags. Even ropes, which for a long time had remained practically unmovable, fall quite appreciably. Felts, belting, and other paper mill accessories remain unchanged.

The ordinary grades of boards are especially affected by overproduction, and the manufacturers are forced to reduce their output because the buyers hesitate to stock up, owing to the uncertainty of the morrow.

Nervous Condition Disappearing

At the beginning of May we find the market losing the nervousness which it had recently exhibited, and the situation would be even better if the banks did not systematically restrict credits.

The news mills have secured orders, for Swedish news costs considerably more than the domestic article. The Swedes quote 15 pounds (per ton) f. o. b., which, at the prevailing rate of exchange is equal to 138 francs (per 100 kilos). Adding the transportation charges, customs duty, and incidental charges, the Swedish paper costs about 170 francs, delivered in Paris, while French news costs only 150 francs.

Raw materials have not appreciably changed in price. There is a further decline in wet Norwegian groundwood; but the drop is offset by a raise in the value of the Norwegian crown.

Chemical pulps are weak, but the French mills cannot benefit thereby on account of the high rate of exchange of the Swedish crown. As to rags and waste papers, the market is still depressed.

Instability of the Franc

The pound has now reached an exchange value of over 100 francs while the Swedish crown is worth more than 550, so that by the beginning of June the cost of our raw materials has become very heavy. The instability of the franc interferes to a considerable extent with all transactions, and results in reducing the buying, not only of pulp but of paper as well.

It is almost impossible to buy printing paper abroad, and the importers show little inclination to pass contracts of any size, as they were wont to do previously; so that the publishers of the large dailies are always threatened with the possibility of a shortage of paper. The importers evidently have an understanding amongst themselves, so as to be able to regulate prices as they wish.

The prices of paper remain stationary, and the advance which had been predicted has not yet come, except for a few grades such as kraft, news, imitation parchment, and, in general, all grades of which we do not have a monopoly. The demand for news is extremely active, and a number of mills have discontinued other less paying grades and turned to news print.

News Mills Working to Capacity

At the beginning of July we find the news mills working to capacity, a condition which was paralleled only in 1918. But the mills which have taken contracts to deliver news at 170 francs or less are not making any profits if they did not have the foresight to contract for their raw materials at the time they booked the orders.

The prices of the other grades of paper show a slight, but steady, progression, due to the no less steady fall in the value of the franc.

The market was somewhat dull during the latter half of July,

Who's RESPONSIBLE for LOST TIME?

IS the president responsible for lost time? The "super"? The foreman? The worker? Perhaps it's the board of directors who insist upon letting well enough alone, who continue in the belief that the "old machine" will last another year.

Yet, in how many mills would it be far better to replace this obsolete machinery for new, modern, up-to-date equipment? The immediate result would be the lowering of hourly costs of production, the speeding up of man power, the elimination of lost motion and the turning of the energy of machine and man power to productive tasks.

The NEW BELOIT FOURDRINIER is demonstrating a surprising efficiency in operation, slashing costs to the bone, speeding up production tremendously and making substantial profits for its owners.

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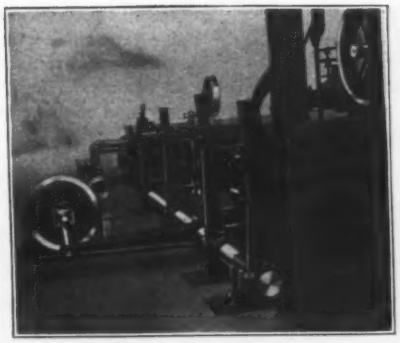


Smooth Running

"I had the pleasure of seeing your machine in operation. Words fail me in which to express my admiration at such a smooth-running machine."

The NEW BELOIT FOURDRINIER

BELOIT IRON WORKS — Beloit, Wisconsin, U. S. A.

because a large number of buyers and of consumers left the capital on account of the excessive heat.

Financial Improvement

There is a slight improvement in the financial situation during the first few days of August, and were is not for the unfortunate bankers' strike there would be apparent a notable improvement in the restoration of confidence, lack of which caused heavy loss to our trade and our industry.

Foreign exchanges seem to have become stabilized after their sudden rise in June and the paper mills have enough orders to operate steadily, though not at full capacity. In this respect our situation is better than in several other European countries, notably England where the glutting of the home market and the impossibility of exporting have brought the market to a standstill.

German competition is non-existent. They quote 34 gold marks per 100 kilos for news, which is equivalent to about 175 francs. If we add customs duties, transportation and incidental charges, it is evident that the German mills cannot compete with the French mills.

The cigarette paper mills are very busy.

Rags are quiet, and there has been no change in prices except for a few of the lower grades. Waste papers are a little more active, especially the better grades which are rising. No importations are coming in from England.

Bankers' Strike Handicapped Business

The bankers' strike continued into the first days of September and hampered business to a considerable extent owing to the increasing practice of paying by check. Cases occurred of checks which had not been drawn twenty days after having been deposited. The market remains stationary and the operations of the mills are normal, except the board mills which are still depressed.

The prices of nearly all grades of paper are rising, as is to be expected in view of the ever-mounting cost of raw materials. the incessant demands of labor, and the increasing losses and wastes in the mills due to lack of conscientious and experienced workmen.

A comparison of the pulp market at the present time with that of a year ago shows an advance of about 200 francs a ton, which is due solely to the depreciation of the franc, which now stands fairly firm at 103 to the pound, as compared with 85 at the same period of 1924.

There is a decided rise in waste papers, which started about a month ago. Other lines are unchanged, except rosin which is soaring.

Unprecedented Activity

October ushers in a period of unprecedented activity, due solely to the depreciation of the franc, which induces foreign buyers to purchase from us on a larger and larger scale.

The burden of taxation of the manufacturers is increasing continually. They necessarily pass it on to their customers, who do likewise by the consumers. So that what with one rise after another the economic indexes are mounting ever higher. For instance, the wholesale index prices of forty-five articles averaged for the whole of France stand at 567, using a standard of 100 for the same articles in July 1914.

Ordinary grey boards are still hard to sell, but a slight activity is apparent among the buyers. The reason of the present condition of the board market lies in overproduction. Not only have the small machines destroyed by the Germans been replaced by larger ones, but several other big machines have been installed and are pouring large quantities of grey board on the market. Moreover, the production of strawboard is also increasing rapidly, and its price is much lower than that of grey board.

As regards paper prices, they show an average increase for all grades of about 20 per cent.

Orders Pour in from All Sides

November witnesses an even greater activity in the paper mills. Orders pour in from all sides, both from France and from abroad; but this activity is anything but encouraging as it is merely a consequence of the fall in value of the franc, which for some time has been at more than 25 to the dollar. Rosin reaches heights which are nothing short of ridiculous in view of the abundance of this material in our own forests. Paper making felts have increased about 10 per cent, and other supplies cannot fail to follow suit.

The decrease in the amount of imports which had flooded France since 1920 is giving rise to a very abnormal condition: the mills actually are refusing orders from some buyers.

Concern About Raw Material

In December the volume of business is still further increased, board following the lead set previously by paper, and many manufacturers are beginning to worry about the renewal of their stocks of raw materials. The prices of both chemical and mechanical pulps are still climbing, not only on account of the fall of the franc, but also because there is an advance in the producing countries. Manufacturers of rayon are using more and more bleached pulp, so that the supply available for the paper industry is reduced very appreciably.

As it is absolutely impossible to buy waste paper in England, it is scarce and the price is rising.

The cigarette paper mills are handicapped by a rise in the lira, which makes the purchasing of Italian hemp very onerous.

All these factors combine to make the future very uncertain, and the manufacturers are forced to exercise great caution. A number of them, therefore, met recently at headquarters of their Association to examine the various problems arising from the present financial situation, which threatens to become alarming. It is suggested that customers be asked to deposit 60 per cent of the price of the order on the day the contract is registered. The proposition is not devoid of interest, for it would have the advantage of fixing cost prices, and consequently sale prices also.

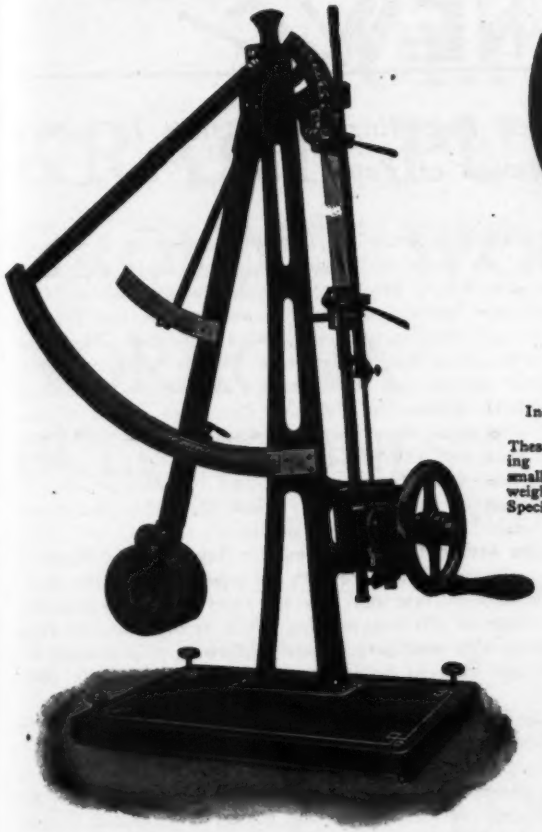
Wide Fluctuations

In conclusion it may be said that the 1925 paper market witnessed wide fluctuations. It was very quiet at the outset, and became extremely active at the end. Certain grades registered very considerable advances; news, for instance rose from about 150 francs in January to 220 francs in December. The enormous quantities of news print which entered as payment in kind (40,000 tons) did not affect the French mills at all. But the future is very uncertain, for the spectre of inflation overshadows the paper trade and paper industry and checks all initiative.

Safety Association Holds Annual

The annual meeting of the Ontario Pulp and Paper Makers' Safety Association was held in Toronto last week. A. P. Costigane, secretary-engineer of the association, presented a very satisfactory report on the operations of the past year showing that, both in the frequency and severity of accidents, there had been a much better showing in the mills than in the previous period of 1924. R. A. McInnis of the Abitibi Power and Paper Company, Iroquois Falls, Ont., was re-elected president of the association; George Carruthers of the Interlake Tissue Mills, Toronto, vice president, and A. P. Costigane, Toronto, secretary-engineer. The directors elected were as follows: J. H. Albert, J. R. Booth, Limited, Ottawa, who replaces John Black; H. St. J. Jarvis, Don Valley Paper Company, Toronto; Col. C. H. L. Jones, Spanish River Pulp and Paper Mills, Sault Ste. Marie; C. Nelson Gain, Canadian Vegetable Parchment Company, Merritton; K. S. Maclachlan, Lincoln Mills, Merritton; W. J. Wallace, Howard Smith Paper Mills, Cornwall, and I. H. Weldon, Provincial Paper Mills, Toronto.

Poller Paper Instruments Insure Accuracy



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These scales are furnished for weighing a full size sheet, 24x36, or a small piece. Both will indicate ream weight by direct reading. No springs. Special scale for Tissue Papers.

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For coarse or fine papers. By weighing a piece 2½x3¼ the standard ream weight is accurately shown. Very accurate and reliable. Weighs less than one pound and can be carried without inconvenience.

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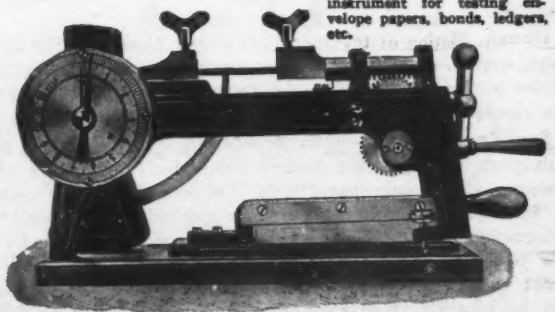

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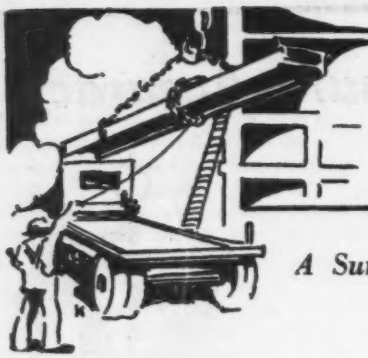

CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

Toledo Ohio—The Toledo Paper Stock Company, 1309-19 Lagrange street, has awarded a general contract to the Gettins & Kopike Company, 15th and Wabash streets, for the rebuilding of its three-story and basement plant, destroyed by fire several weeks ago. The work will cost close to $30,000. E. W. Marvin is one of the heads of the company.

Marinette, Mich.—The Continental Paper and Bag Mills Corporation, 100 East 42nd street, New York, has acquired a water power site on the Menominee River at Chapple Rapids, for a proposed hydroelectric power development for its mills in this district at a future date, still to be determined.

Sacramento, Cal.—Black, Moffitt & Towne, 41 First street, San Francisco, have concluded negotiations for the purchase of property on Front street, between K and L streets, Sacramento, as a site for a proposed new storage and distributing plant, for which estimates of cost will be made at an early date.

Seattle, Wash.—The Zellerbach Paper Company, Sacramento, Cal., has awarded a general contract to Peter Gjarde, Lyon Building, Seattle, for the construction of its proposed new warehouse and distributing plant at 1254-64 First Avenue, South, Seattle, to cost in excess of $100,000, with equipment. Work will proceed immediately. Bebb & Gould, Hoge Building, are architects.

Denver, Colo.—The Inland Paper Box Company, 1624 Blake street, has acquired property at 1621-25 Wazee street, for a new plant. The existing structure is five-story and will be remodeled and improved. It is proposed to begin work at an early date. W. E. Warneke is head.

International Falls, Minn.—The new mill of the Minnesota and Ontario Paper Company, for which work will proceed at once will be two-story, 120 x 400 feet, and will be equipped primarily for the production of wrapping papers. It is reported to cost close to $100,000, including equipment. E. W. Backus is president.

Detroit, Mich.—The Fisher Wall Paper Company, 514 Randolph street, is said to have plans under way for the rebuilding of the portion of its local works, recently destroyed by fire with loss reported in excess of $75,000, including equipment.

San Francisco, Cal.—Officials of the Traung Label and Lithograph Company, 962 Battery street, has organized a new company of the same name under Delaware laws, with capital of $15,000,000, to manufacture paper specialties, and operate a lithographing plant. The company has plans in progress for a new two-story and basement factory on Pacific street, between Front and Battery streets, to cost approximately $175,000, and will begin work at an early date. Couchot & Rosenwald, 60 Sansome street, San Francisco, are architects.

Berlin, N. H.—The Brown Company, Portland, Me., operating pulp and paper mills in this district, has disposed of a bond issue of $20,000,000, for general financing and expansion. The company is reported to be planning for increased capacity. The present mills have an output of 250 tons of kraft, bond, and other papers per day, with two sulphite works with rating of 550 tons of pulp daily. H. J. Brown is president.

Philadelphia, Pa.—The Edwin J. Schoettle Company, 533 North 11th street, manufacturer of paper boxes and containers, has taken bids on general contract for the construction of a proposed new addition to its plant at Eleventh and Brandywine streets, and plans to begin work at an early date. The extension is estimated to cost in excess of $50,000, with equipment. J. Fletcher Street, 1120 Locust street, Philadelphia, is architect.

Denver, Colo.—The Colorado Pulp and Paper Company, 1520 21st street, Denver, has completed plans for an addition to its storage and distributing plant, to be one-story, 35 x 125 feet. A portion of the structure will be used for office service. Work will begin at an early date. Frank M. Ladd, Manufacturers' Exchange Building, Denver, is architect.

Port Arthur, Ont.—The Thunder Bay Pulp and Paper Company will proceed at once with the construction of the first unit of its proposed new local pulp and paper mill, to be equipped for a capacity of 100 tons per day. It is reported to cost close to $100,000, with machinery. Closely following it is planned to add additional units to develop a gross output of close to 400 tons daily.

Cap Rouge, Que.—The St. Regis Paper Company will break ground within the next month for its proposed new paper mill on local site, and will rush work to early completion. The company has contracted with the Quebec Power Company for power supply for the new unit. The project is estimated to cost in excess of $300,000.

St. Boniface, Man.—The Weiner-Brownell Paper Mills, Ltd., Winnipeg, Man., has plans under way for the construction of a new mill on local site, to be one-story, 65 x 220 feet, estimated to cost close to $250,000, with equipment. It is expected to handle erection by day labor and to begin work in the near future. B. W. Parker, Union Bank Building, Winnipeg, is engineer.

Winnipeg, Man.—The Manitoba Paper Company, recently organized with capital of $11,500,000, will take over the local plant and business of the Manitoba Pulp & Paper Company. The new company has plans under advisement for extensions in operations, including the development of pulp wood resources on acquired lumber lands.

New Companies

Cincinnati, Ohio—The Merchants Paper Company, Inc., has been incorporated with a capital of $25,000, to manufacture and deal in paper products. The incorporators are James M. Brennan, Bernard H. Denning, and Lincoln Bradley, all of Cincinnati.

Chicago, Ill.—The Corrugated Fibre Lath Company, 711 Euclid Place, Alton, Ill., has been incorporated with a capital of $162,000, to manufacture fibre products. A local mill will be operated. The incorporators are Albert D. Snyder, H. C. Evans and Harry A. Cumfer. The company is represented by John J. Brenholt, Snyder Building, Alton.

New York, N. Y.—The Eagle Envelope Company has been incorporated with capital of $50,000, to manufacture paper goods. The incorporators are A. B., and N. Rosenzweig, and G. J. Suskin. The company is represented by Abraham Weinstein, 51 Chambers street, New York.

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Southern Superintendents Meet at Monroe, La.

MONROE, La., March 29, 1926.—The Third Semi-Annual meeting of the Southern Division of the American Pulp and Paper Mill Superintendent's Association was held here Friday and Saturday of last week.

The reception committee, B. Beasley and T. T. Howe, of West Monroe, La., welcomed those who came by train and arranged accommodations at The Virginia Hotel. Friday morning was spent in visiting The Brown Paper Mill Company's plant at West Monroe where a hearty welcome was extended by Mr. Brown and the manager George S. Holmes.

After a luncheon attended by sixteen of the members a meeting was held at 3 p. m. in the banquet room of the Virginia Hotel. Owing to the absence of all of the officers it was necessary to effect a temporary organization. Wm. M. Cary, superintendent of the E-Z Opener Bag Company, Braithwaite, La., was elected chairman pro tem, and R. H. Stevens, chief chemist of the Bogalusa Paper Company, was elected secretary to fill the unexpired term of L. J. Witham, deceased.

Adopt Resolutions on Death of Mr. Witham

The meeting adopted a resolution of sorrow over the death of Mr. Witham and stood for a moment with bowed heads in respect to his memory.

Under the leadership of Mr. Cary the members discussed problems connected with the various parts of mill operation. About six o'clock the meeting adjourned until the following morning when an excursion was made through the plants at Bastrop. Here they were entertained at luncheon in the delightful Bastrop Inn whose comfortable home-like atmosphere and the native-style of cooking typified Southern hospitality. An address of welcome by Mayor McBride and a talk by Mr. Burgess of the local gas company inviting the location of additional paper mills in the Morehouse Parish gas field were features of the luncheon.

Banquet by Brown Paper Mills Co.

The convention closed with a banquet given by The Brown Paper Mill Company at the Virginia Hotel in Monroe, Saturday night, March 27th. Mr. W. W. Henderson, manager of the Bastrop Pulp and Paper Company acted as toastmaster calling on representatives of each of the mills for comments, criticisms or suggestions on the manufacture of pulp and paper as practiced in Northern Louisana.

After voting to meet again at Bogalusa, La., November 19-20, and extending a vote of thanks to their genial hosts of the Brown Paper Mill Company the convention adjourned.

Among Those Who Attended

The following were present at the banquet:

H. B. Jones, Pynetree Paper Co., Gordon, Ga.

Wm. M. Cary and J. L. Richardson, E-Z Opener Bag Co., Braithewaite, La.

A. Zimmerman, O. M. Zimmerman and M. J. Ferdelman of the Boldt Paper Co., New Iberia, La.

H. C. Carter and E. N. Wilson of the Yellow Pine Paper Mill, Orange, Texas.

J. M. Murray, J. J. Morrell, Joe Brovillet, A. Surer and R. N. Stevens of the Bogalusa Paper Company, Inc., Bogalusa, La.

J. E. Whitfield, O. W. Getchell, M. C. McDonald, C. E. Slade, D. C. Metcalf, J. M. Hilton, T. T. Howe, B. Beasley of the Brown Paper Mill Company, West Monroe, La.

O. J. Oleson, H. A. L. Swan, Erling Riis, L. A. Huff, A. H. Dumaree, C. T. Wilson of the Louisana Pulp and Paper Company, Bastrop, La.

W. W. Henderson, H. E. Baumgarten, Ira Hull, C. L. Crain, Adam Rozyskie, A. L. Ross and D. G. Campbell of the Bastrop Pulp and Paper Company, Bastrop, La.

F. B. Mead of the Westinghouse Electric Company.

Vincent Waters of the Maxson Automatic Machinery Company, Westerly, R. I.

C. W. Boley, Western Papermakers Chemical Company, Kalamazoo, Mich.

H. Nichols and H. W. Stough of the Weeks Supply Company, Monroe, La.

Brotherhood to Meet With Paper Men

[FROM OUR REGULAR CORRESPONDENT]

ALBANY, N. Y., March 22, 1926.—The first of many conferences between paper manufacturers of United States and Canada and the International Brotherhood of Papermakers, with headquarters in this city, leading up to the signing of a new wage and working agreement on May 1, will take place at Iroquois Falls, Ont., on Monday, March 29. W. R. Smith, president of the International Brotherhood of Papermakers, will go to Iroquois Falls a day or two previous to meet with a committee from the local there and who in turn will meet with representatives of the Abitibi Power and Paper Company. During the month of April Mr. Smith, Frank P. Barry, of Ballston Spa, and Arthur Huggins, of Holyoke, Mass., will cover thousands of miles meeting with representatives of various paper manufacturing companies leading up to the signing of the new agreements.

Everything points to an utter lack of friction this spring between the paper manufacturers and the union except, of course, in the mills of the International Paper Company where a strike has been in existence since May, 1921. About 40 manufacturers will make new agreements.

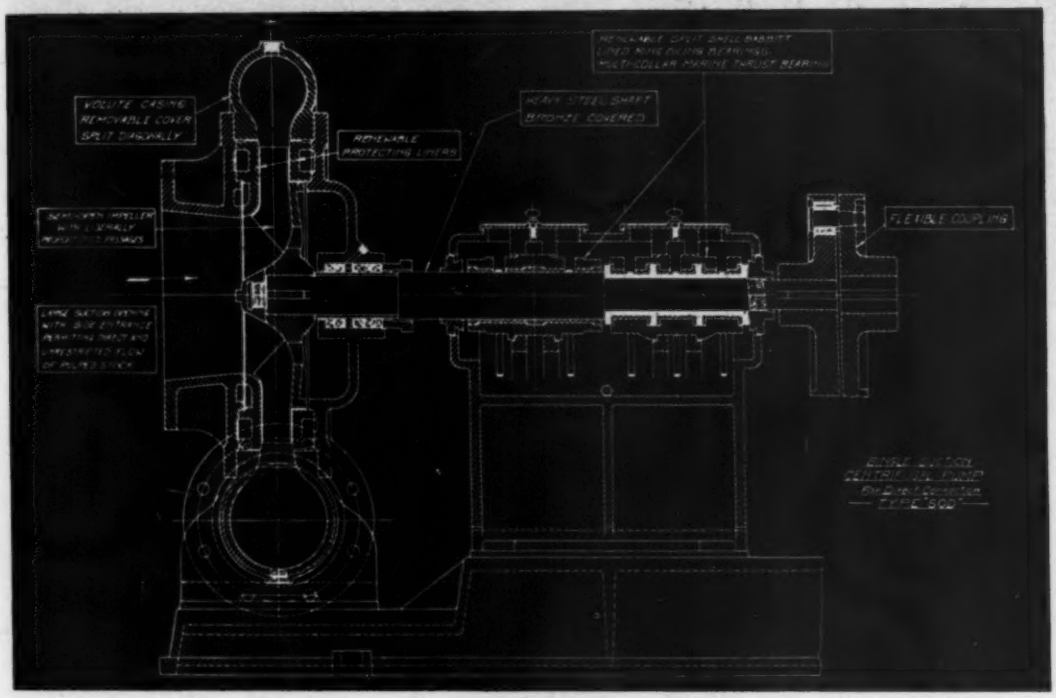
With one exception all agreements between manufacturers and the paper makers' union now expire on May 1. This has been brought about during the last few years and is regarded as far more satisfactory than in the past when some agreements terminated on May 1 and others at various dates later on with the result that there was more or less confusion.

In all cases representatives from locals in the towns in which a company's mills are located will have a say in the final agreement to be signed. In other words, whenever one of the three officers of the International Brotherhood of Papermakers arrives in town to meet with the employers the local will have had sufficient notice beforehand to name a committee to meet and confer with the International officer previous to meeting with representatives of the company. This procedure will result in little matters being ironed out to the satisfaction of everyone and will also do away with any idea that the international is taking matters over the head of the local which naturally is most interested in the outcome of negotiations.

Letters have been sent out from here within the last day or two to all manufacturers with whom the International Brotherhood of Papermakers enjoys working agreements requesting that a date be named at which representatives of the union and the company may meet to take up the signing of the wage and working agreement from May 1 on. Dates are already being assigned for these conferences, the first being with the Abitibi Company on March 29.

Paper Sales Small at Leipzig Fair

WASHINGTON, D. C., March 31, 1926.—German paper manufacturers were disappointed with the results of the Leipzig Spring Fair, according to a report from Assistant Trade Commissioner Nash, Berlin, who further states that although the paper display was one of the best attended the volume of sales was small. The opinion was freely expressed by both domestic and foreign buyers that prices were too high. In this connection some criticism has appeared in trade journals in regard to the cartel system of fixing prices, which in the desire to protect the weak member of the organization as well as the strong ones, has consistently tended to keep prices above the world's market level.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HEAVY STEEL SHAFT BRONZE COVERED
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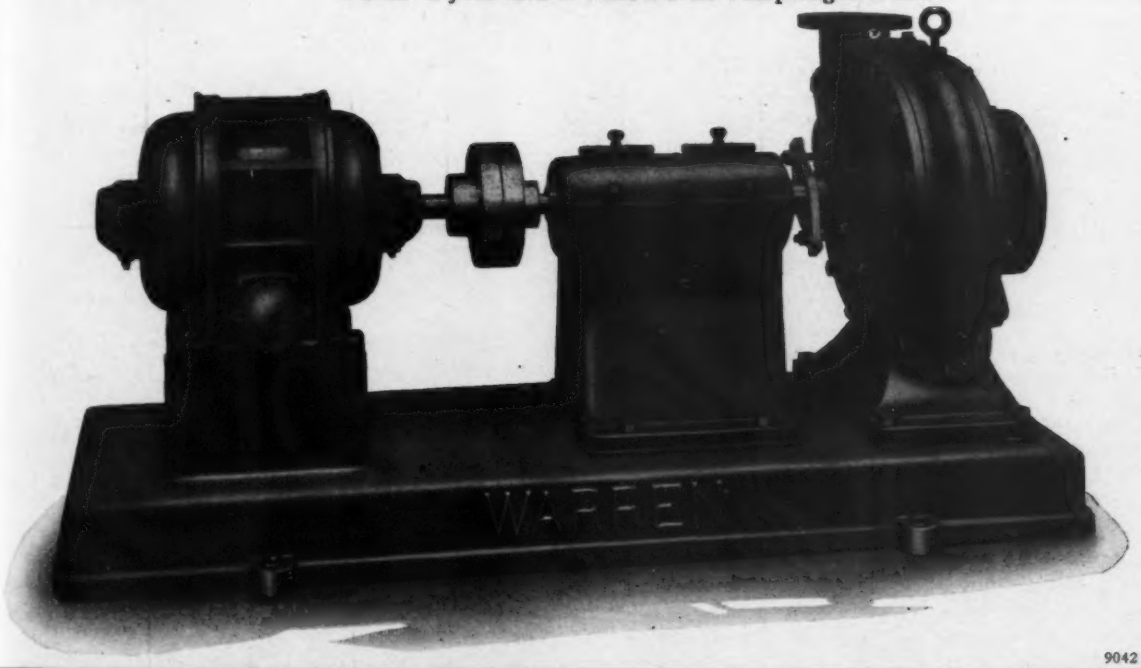
Look It Over!

In design, in construction, in performance,— the WARREN STUFF PUMP is your idea of what a Stuff Pump ought to be.



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Boston	Chicago	New York
Philadelphia	St. Paul	San Francisco

New York Trade Jottings

Dr. E. O. Merchant, of the Mead Pulp and Paper Company, of Dayton, Ohio, was a prominent visitor to New York last week.

* * *

E. C. Duffin, of the Bowater Paper Company, of 342 Madison Avenue, New York, has returned to headquarters after a flying trip to England.

* * *

John Stadler, managing director of the Newfoundland Power and Paper Company, Ltd., of Grand Falls, Newfoundland, is in town this week.

* * *

H. J. Buncke, Chief Engineer of the Abitibi Power and Paper Company, Ltd., Iroquois Falls, Ontario, was a visitor to New York early this week.

* * *

Edgar L. Pearson, of Edgar L. Pearson & Co., paper dealers and exporters, of Houston, Tex., has been visiting the New York office of his house at 200 Fifth Avenue.

* * *

At the regular luncheon meeting of the Salesmen's Association of the Paper Industry on Monday, at the Town Hall Club, New York, plans for the future were discussed by the members present.

* * *

The City Salvage Corporation, of the Bronx, New York, has been incorporated under the laws of the State of New York, with a capital stock of $20,000, to deal in waste materials. The incorporators are F. A. Sapede and A. Yovits.

* * *

M. C. Walsh, Research Fellow at Mellon Institute, Pittsburgh, for the Paper Industries Association, was a New York visitor this week, attending a meeting of his association. Mr. Walsh has also supervision of the testing laboratory that is maintained at Rockaway, N. J.

* * *

G. L. M. Hellstrom, representative of the Karlstad Machine Works, of Sweden, makers of pulp and paper mill equipment, is a New York visitor. Mr. Hellstrom is located in Montreal, where he has opened an office to take care of the business for his firm in Canada, as well as in the United States.

* * *

Dr. J. L. A. Macdonald, technical director of the Tullis-Russel Company, Ltd., Markinch, Scotland, has returned to New York, after a tour of the United States and Canadian paper mills and research laboratories. Doctor Macdonald is returning to Scotland very soon but expects to come back later for another visit.

* * *

In connection with the forthcoming American Forest Week, R. S. Kellogg, secretary of the News Print Service Bureau, is scheduled to address the Advertisers Club, at their luncheon on Tuesday, April 20. Later in the day Mr. Kellogg is to broadcast an address through Station WGY of the General Electric Company.

* * *

Dr. C. A. Schenck, internationally known forester, who has been doing special work at the University of Missouri during the last three months, has arrived in New York, and will attend a special reunion of the Biltmore graduates on Friday at the Canadian Club. On Saturday, Dr. Schenck sails for Europe on the Holland American liner *Volendam*, accompanied by twenty other foresters

* * *

E. C. Tucker, manager of production for the Chemical Paper Manufacturing Company, Holyoke, is now vice-president of the company. Mr. Tucker graduated from Dartmouth College in 1913, and spent two years in the Harvard Graduate School. He started as chemist with the Crocker-McElwain Company in 1915, and in 1922 was transferred to the Chemical organization, where he was soon advanced to production manager. Mr. Tucker is also vice president of TAPPI.

* * *

During his recent visit to Pinehurst, N. C., Harold C. Levett, of the Ardsley Golf Club, Ardsley-on-Hudson, N. Y. and treasurer of Miller, Tompkins & Co., manufacturers of paper bags and sacks, of 16 Desbrosses street, New York, scored an ace on the fifth hole of the No. 3 course, which measures 221 yards. Those who played with the newest "immortal" were A. P. Hawley, a clubmate, and two Springfield, Mass., golfers, W. H. Sargent and W. H. Nevins.

* * *

Dr. Rudolf Sieber, of Kramfors, Sweden, who has been visiting the United States and Canada for the past two months, has returned to New York and will sail for Sweden April 8. Doctor Sieber is very well known as an eminent cellulose chemist, having been associated for several years with Dr. C. G. Schwalbe at Darmstadt. Since becoming chief chemist of the Kramfors Company he has had practical experience in the manufacture of strong sulphite and kraft pulp, for which this mill is noted. At the annual meeting of TAPPI, which he attended, and in his visits to the pulp and paper mills, Doctor Sieber met many of his former classmates at Darmstadt and made many new friends.

* * *

Importers of paper will be interested to learn that following its success in bringing about the adoption of a standard inland bill of lading by exporters, the New York Freight Forwarders and Brokers Association has appointed a committee to prepare a new form of contract to be used in arranging with steamship lines for cargo space. As was formerly the case with inland bills of lading, each broker has his own form of contract for ocean freight, differing in both size and wording from that used by others. These differences have been the source of many misunderstandings in the past. When the tentative draft has been approved a conference will be arranged with representatives of the steamship lines to get their views for embodiment in the final form for use by all members of the association.

To Tear Down Fall Mountain Mill

[FROM OUR REGULAR CORRESPONDENT]

BELLOWS FALLS, Vt., March 29, 1926.—The Fall Mountain mill of the International Paper Company here will cease operations on or before May 1 it is announced by the manager, David J. Lawlor. One papermaking machine will continue to be run and the core plant. All the mill buildings with one exception will be torn down. Some 50 men will be retained to run the core plant and about 200 will be employed this summer in the tearing down of the buildings. The Company recently sold most of its power to the New England Power Company which will instal an electric plant capable ultimately of a production of 45,000 horse power, the power station being located on the old company canal. The abandonment of the mill marks the culmination of trouble for the town which began with the disastrous strike of six years ago. The mills have never operated at capacity since.

Influence of Simplified Practice

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., March 31, 1926.—Influence of Simplified practice recommendations is more than nation-wide says the Simplified Practice Division of the Department of Commerce. The Canadian mills, the Division is informed, are watching progress in matters affecting sizes and weights, as well as uniform warehouse, purchase and invoice and inquiry forms and bank checks. "The tendency of our mills," says one writer to the division, "is, as you perhaps know, to follow the American mills in such matters."

Throw out your deckle straps!

Save your wires and increase production

The equipment, shown above, is designed to bolt to the underside of old deckle frames and extends beyond the first slice toward the breast rolls. It makes a perfectly tight joint with the apron. Where a high slice or other stock inlet is used, the device can be supported from the side rails.

The Wentz "No Deckle" Device consists of a very thin rubber ruler five to eight feet long resting at an angle on the wire. This rubber ruler is clamped against a triangular brass bar and is easily adjusted or replaced. No water spray is used in connection with this device.

HAVE you ever noticed what your deckle straps do to your wire? Have you ever thought that if you could do away with deckle straps you would get longer life from your wires? The wire always wears first at the edge, the weakest place, because it must pull the load of the heavy straps.

The Wentz "No Deckle Strap" Device scraps deckle straps forever, and permits you to make a sheet 2 to 4" wider than is possible with deckle straps. This extra paper alone pays for the device in a few months. The longer life of the wires and saving of wear on table rolls is *clear profit.* The Wentz "No Deckle Strap" Device (patent applied for) works equally well on any sheet no matter how light or how heavy. It is easily applied to old and new machines and whenever it is tested it is adopted on all machines.

Write for bulletin and prices, giving length of your Fourdrinier section.

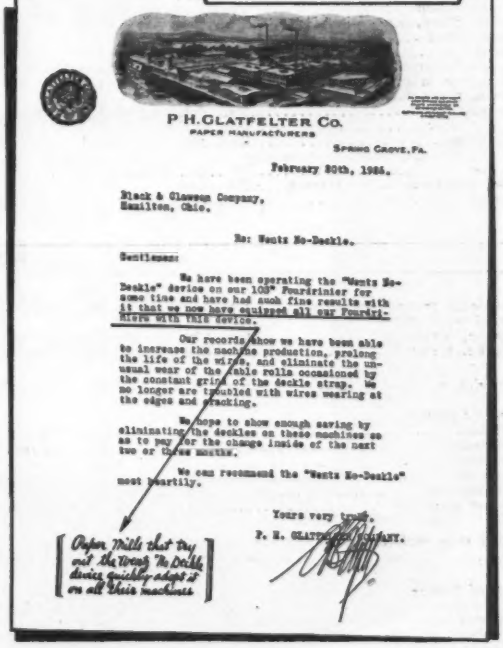
THE BLACK-CLAWSON CO.,

Hamilton, Ohio

Established 1873

Export office 15 Park Row, New York City

Builders of Highest Quality Paper and Pulp Mill Machinery
Patentees and sole builders of Vertical Dryers



P H. GLATFELTER CO.
PAPER MANUFACTURERS
SPRING GROVE, PA.

February 20th, 1926.

Black & Clawson Company,
Hamilton, Ohio.

Re: Wentz No-Deckle.

Gentlemen:

We have been operating the "Wentz No-Deckle" device on our 108" Fourdrinier for some time and have had such fine results with it that we now have equipped all our Fourdriniers with this device.

Our records show we have been able to increase the machine production, prolong the life of the wires, and eliminate the unusual wear of the table rolls occasioned by the constant grind of the deckle strap. We no longer are troubled with wires wearing at the edges and cracking.

We hope to show enough saving by eliminating the deckles on these machines so as to pay for the change inside of the next two or three months.

We can recommend the "Wentz No-Deckle" most heartily.

Yours very truly,

P. H. GLATFELTER COMPANY.

Paper Mills that try out the Wentz No Deckle device quickly adopt it on all their machines

BLACK-CLAWSON

"NO DECKLE" DEVICE

Built with Machine-Tool Accuracy

PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

For the Month Ending January 31, 1926, and for the Seven Months Ending January 31, 1926 as Compared with Corresponding Months of Previous Year

IMPORTS—PAPER

	January				Seven Months Ending January 31			
	1925		1926		1925		1926	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Paper and manufactures (total)	.....	9,575,776	.....	9,810,486	.....	67,810,348	.....	69,758,848
Printing paper—								
Standard newsprint ..... lbs...free	225,171,675	8,174,459	252,856,539	8,691,397	1,590,278,772	58,373,774	1,699,741,075	60,518,422
Imported from—								
Finland	6,763,603	206,022	1,579,997	46,136	39,963,448	1,280,382	16,962,059	512,137
Germany	5,357,868	163,334	6,487,171	196,625	31,168,381	935,121	30,170,651	945,359
Netherlands	20,552	748	.....	.....	1,017,960	33,103	352,849	10,600
Norway	2,027,416	62,195	.....	.....	26,545,898	830,536	14,745,648	445,063
Sweden	16,538,688	517,560	6,261,473	209,843	97,733,183	3,065,080	70,189,662	2,141,947
Canada	192,034,029	7,137,823	226,453,068	7,853,719	1,381,640,218	51,824,619	1,517,254,583	54,798,914
Other countries	2,429,519	86,777	12,074,830	385,074	12,209,684	404,933	50,065,623	1,664,402
All other, n. e. s. ..... lbs...dut.	1,834,735	88,763	816,070	41,389	15,177,856	672,539	7,221,299	362,144
Grease-proof and water-proof papers..lbs...dut.	127,782	13,501	107,113	15,045	671,405	79,631	1,292,975	170,241
Kraft wrapping paper ..... lbs...dut.	1,683,307	67,752	844,365	35,624	12,945,344	524,251	7,161,841	313,549
All other wrapping paper ..... lbs...dut.	949,388	38,913	255,010	15,310	9,126,874	370,823	2,179,340	125,479
Writing, drawing, bond, etc. ..... lbs...dut.	214,435	57,958	310,535	59,573	1,826,701	437,801	2,025,968	485,244
Surface coated ..... lbs...dut.	165,452	40,128	103,053	66,604	1,247,786	290,310	870,118	336,960
Tissue paper ..... lbs...dut.	161,692	93,254	198,403	85,476	1,480,658	593,642	1,355,026	576,322
Pulp boards in rolls ..... lbs...dut.	5,943,257	180,264	5,803,437	139,615	37,800,248	1,035,713	39,434,302	1,017,976
Other paper boards, n. e. s. ..... lbs...dut.	3,409,129	77,702	2,464,664	59,067	18,259,585	420,280	15,663,095	398,428
Cigarette paper, cigarette books and covers ..... lbs...dut.	1,020,125	270,826	506,250	152,720	6,193,779	1,767,744	7,320,922	2,096,300
Hanging paper ..... lbs...dut.	779,792	55,006	277,873	62,844	7,410,692	333,267	2,981,897	359,333
Paper boxes ..... lbs...dut.	203,973	132,059	150,728	74,612	1,261,866	838,998	1,238,922	674,013
Pulp or papier-mache and manufactures of, n. e. s. ..... lbs...dut.	.....	.....	233,121	33,280	.....	.....	233,121	33,280
Duplex decalcomania, not printed ..... lbs...free	51,014	11,855	33,827	8,650	316,488	75,114	235,066	59,481
All other ..... dut.	.....	273,336	.....	269,280	.....	1,996,461	.....	2,231,676

WOOD PULP

Mechanically ground wood pulp ..... ton..free	19,781	627,006	22,668	648,654	149,926	4,793,358	181,955	5,108,854
Chemical wood pulp—								
Sulphite, unbleached ..... ton..free	62,424	3,360,876	65,005	3,659,670	390,539	20,668,306	360,290	19,856,902
Sulphite, bleached ..... ton..free	29,047	2,130,001	25,896	2,065,386	180,110	13,358,175	158,277	12,677,521
Total sulphite ..... ton	91,471	5,490,877	90,901	5,725,056	570,649	34,026,481	518,567	32,534,423
Imported from—								
Finland	4,823	224,151	5,591	272,323	31,308	1,594,641	29,560	1,614,941
Germany	5,668	317,590	7,252	476,442	53,141	3,069,290	34,217	2,166,360
Norway	4,434	294,251	6,419	509,316	42,536	2,897,068	37,475	2,920,704
Sweden	43,056	2,465,581	33,783	2,016,290	227,711	12,591,356	163,315	9,798,997
Canada	30,053	1,949,755	31,076	2,094,326	197,329	12,794,972	236,958	15,154,123
Other countries	3,437	239,549	6,780	356,359	18,624	1,079,154	17,042	879,298
Sulphate pulp, unbleached (Kraft pulp) ..... ton..free	34,702	1,937,068	18,838	1,165,114	195,294	10,906,895	173,292	10,523,183
Imported from—								
Finland	1,038	50,779	1,650	92,620	8,760	420,947	9,455	519,416
Norway	885	49,247	169	10,864	8,475	456,491	5,408	334,906
Sweden	22,517	1,212,559	6,083	361,432	106,942	5,582,322	81,754	4,718,001
Canada	10,262	624,483	10,398	673,662	67,901	4,278,376	73,584	4,739,341
Other countries	.....	.....	538	26,536	3,216	168,759	3,091	211,519
Sulphate pulp, bleached ..... ton..free	995	58,348	2,579	181,333	26,295	1,460,166	12,955	736,177
Other pulp ..... ton..free	107	11,823	38	3,176	1,063	66,457	476	41,253

CHEMICALS AND OTHER PAPER MAKERS' MATERIALS

Colors, dyes, stains, color acids, and **color bases, n. e. s.** ..... lbs...dut.	644,995	866,801	477,854	573,153	2,467,332	3,367,756	2,908,671	3,193,596
Imported from—								
France	9,388	11,761	29,118	38,541	68,793	100,073	65,012	93,739
Germany	391,395	602,933	229,716	278,254	1,277,633	1,838,901	1,428,152	1,580,824
Italy	19,385	22,422	4,867	4,946	84,505	124,356	61,368	72,631
Switzerland	161,790	178,987	165,908	178,640	774,906	1,019,792	1,118,869	1,122,467
United Kingdom	19,612	14,987	12,317	12,345	84,081	75,850	72,052	63,409
Other countries	43,425	35,711	35,928	60,427	177,414	208,784	163,218	260,526
Kaolin, china, and paper clay ..... ton..dut.	14,875	162,579	24,295	242,290	165,677	1,655,947	178,520	1,763,933
Casein or lactarene ..... lbs...dut.	1,441,935	98,938	1,245,000	112,175	9,455,376	670,936	8,546,278	794,982

(*Continued on page 52*)

KENWOOD PULP FELTS

Increase Production

Because of their extreme OPENNESS, they pick up heavier, thicker sheets and give maximum Water-Removal.

This permits smoother running with less trouble and—on dry machines—a DECREASE in steam consumption. They are, therefore, MOST ECONOMICAL.

F. C. Huyck & Sons

KENWOOD MILLS
ALBANY, N.Y., U.S.A.

KENWOOD MILLS LTD.
ARNPRIOR, ONTARIO, CANADA.

KENWOOD
WOOL PRODUCTS

PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

(*Continued from page 50*)

PAPER AND MANUFACTURES OF	January 1925 Quantity	January 1925 Value	January 1926 Quantity	January 1926 Value	Seven Months Ending January 31 1925 Quantity	Seven Months Ending January 31 1925 Value	Seven Months Ending January 31 1926 Quantity	Seven Months Ending January 31 1926 Value
CRUDE PAPER STOCK								
Rags for paper stock ..... lbs...free	56,343,973	1,640,693	41,902,565	1,108,810	340,454,319	8,643,209	316,587,235	8,378,991
Waste bagging, waste paper, etc. ..... lbs...free	11,662,148	191,898	10,104,973	212,473	69,553,086	897,292	79,426,947	1,459,549
Old rope and all other paper stock ... lbs...free	6,115,114	333,044	5,713,037	274,122	51,487,586	2,747,707	40,560,048	1,830,166
EXPORTS—PAPER								
Paper and manufactures (total)	.....	1,750,795	.....	2,135,725	.....	13,254,797	.....	14,461,441
Printing paper—								
Newsprint paper ..... lbs.	3,146,700	130,890	4,978,487	231,687	18,853,857	950,675	27,115,774	1,227,026
Exported to—								
Canada	53,457	4,477	38,980	3,344	428,271	32,099	477,019	32,598
Central America	26,199	1,440	133,031	5,777	365,373	20,972	943,582	48,202
Mexico	148,313	6,038	60,368	3,306	1,140,598	60,427	970,881	52,833
Cuba	773,416	28,973	235,976	10,358	8,423,593	364,972	7,109,783	294,143
South America	1,735,317	69,625	866,475	42,218	3,234,450	158,669	3,632,075	171,898
China	7,541	600	1,423,600	67,513	2,085,471	150,559	5,666,541	255,823
Philippine Islands	324,126	16,115	489,425	21,517	2,419,514	112,866	3,319,291	147,777
Other countries	78,331	3,622	1,730,632	77,654	756,587	50,111	4,996,682	223,753
Book paper, not coated ..... lbs.	1,349,487	142,802	1,302,162	120,796	12,183,829	1,311,491	10,074,945	1,091,271
Exported to—								
United Kingdom	10,451	2,009	7,322	1,102	271,576	59,154	64,946	11,293
Canada	163,958	19,331	190,104	20,872	861,538	108,788	1,132,577	138,342
Central America	69,954	7,169	75,013	6,988	374,130	40,771	419,657	42,722
Mexico	227,653	29,399	206,134	18,322	1,547,892	172,293	1,107,102	122,232
Cuba	409,450	31,097	119,661	10,370	2,527,188	258,578	2,347,659	227,816
Argentina	74,737	8,185	21,397	2,677	376,475	40,190	450,285	52,987
Brazil	12,039	1,613	3,905	507	216,530	27,196	137,390	23,991
Venezuela	18,908	2,558	50,655	5,066	251,883	29,008	538,447	49,821
Other South America	73,278	8,020	104,246	9,488	813,135	90,838	859,541	81,183
China	41,415	6,188	246,647	19,083	3,282,360	295,520	786,471	117,738
Philippine Islands	92,687	9,284	161,718	12,810	683,382	66,836	1,070,543	95,380
Australia	35,227	3,681	18,999	2,324	298,820	32,675	271,407	29,506
Other countries	119,730	14,268	96,361	11,187	678,920	89,644	888,920	98,260
Cover paper ..... lbs.	95,660	16,558	159,665	24,303	555,787	106,735	769,698	138,205
Greaseproof paper and waterproof paper .... lbs.	151,222	16,830	108,329	18,305	821,078	97,414	1,253,719	182,032
Wrapping paper ..... lbs.	2,280,027	187,699	3,353,004	215,152	15,057,651	1,164,993	17,989,855	1,278,415
Surface-coated paper ..... lbs.	245,049	37,718	871,202	85,234	2,068,982	289,150	2,890,974	384,424
Tissue and crepe paper ..... lbs.	298,865	75,345	288,917	81,005	1,942,877	533,639	2,358,942	599,208
Toilet paper ..... lbs.	411,134	59,097	318,191	41,662	2,569,782	316,288	2,773,745	335,144
Paper towels and napkins ..... lbs.	85,516	10,335	217,731	23,987	786,079	128,337	1,221,777	171,249
Box board ..... lbs.	770,437	31,827	4,032,474	112,981	770,437	31,827	20,021,889	666,119
Bristols and bristol board ..... lbs.	64,694	6,560	102,284	17,335	421,644	52,399	794,087	91,675
Other paper board and strawboard ..... lbs.	2,235,480	105,781	2,103,715	115,984	36,401,712	1,361,709	18,330,723	939,435
Sheathing and building paper ..... lbs.	1,176,822	56,631	944,486	44,105	6,125,335	299,279	7,792,158	356,351
Wall board of paper or pulp ..... sq. ft.	1,379,735	57,879	641,662	25,703	9,168,401	323,648	8,019,546	274,466
Blotting paper ..... lbs.	240,114	29,150	316,024	37,842	1,507,517	179,365	1,807,973	224,719
Filing folders, index cards, and other office forms ..... lbs.	50,346	13,939	124,694	25,393	269,156	87,543	456,976	142,931
Papeteries (fancy writing paper) ..... lbs.	18,754	7,168	38,362	13,908	302,841	103,130	371,336	132,358
Other writing paper ..... lbs.	152,412	29,779	1,049,282	129,410	1,979,032	332,892	3,643,811	595,126
Cigarette paper and books ..... lbs.	50,649	16,667	35,917	7,361	321,877	110,010	277,683	86,983
Paper hangings (wall paper) ..... yds.	3,230,286	75,904	2,449,588	66,490	12,464,915	303,136	9,794,265	271,520
Paper bags ..... lbs.	1,099,560	98,896	998,222	91,083	6,416,640	550,275	7,469,268	666,387
Boxes and cartons ..... lbs.	794,295	74,254	1,409,459	109,216	7,887,030	705,628	11,178,566	832,444
Envelopes ..... lbs.	228,988	42,193	199,126	40,135	1,504,057	284,868	1,391,068	271,612
Vulcanized fiber, sheets, strips, rods, and tubes ..... lbs.	395,039	118,868	487,585	131,773	2,411,406	781,497	3,269,930	979,365
Manufactures of vulcanized and indurated fiber ..... lbs.	24,171	14,300	86,609	16,538	236,402	107,470	277,628	98,510
Cash-register and adding-machine paper .... lbs.	93,156	9,626	136,643	15,703	747,636	78,311	982,749	103,146
Other paper and paper products ..... lbs.	.....	284,099	.....	292,634	.....	2,663,088	.....	2,321,320
WOOD PULP AND PAPER STOCK								
Sulphite wood pulp ..... tons	1,733	96,995	2,090	141,403	13,113	792,262	13,912	890,054
Soda wood pulp ..... tons	169	16,293	237	22,277	1,066	100,966	1,504	132,839
Other wood pulp ..... tons	1,589	157,996	498	92,041	5,158	520,955	4,154	385,568
Rags, and other paper stock ..... lbs.	14,234,145	191,384	14,966,497	189,885	72,391,000	1,170,843	101,506,293	1,970,484
PAPER AND PULP MILL MACHINERY								
Paper and pulp mill machinery ..... lbs.	407,153	88,537	879,987	262,452	5,179,471	1,077,293	5,827,191	1,299,116

Have You Been Paying For a *Briner Economizer* This Winter

Licensed under patents of E. A. Briner and J. E. Alexander

Even Though You Didn't Use One?

Figure what you paid for the extra steam that was required to heat your machine room during the Winter months. The Briner Economizer would have supplied all this needed heat from the vapor which was wasted to the atmosphere. It would have paid for itself IN your mill. But YOU are paying for it otherwise.

Our capacity was taxed to the limit last year for the Briner Economizers in use this past Winter. Let us start now to make a study of your mill and plan to cut your production costs.

Any of our offices will gladly give you full information regarding how Briner Economizers are solving mill problems that may be similar to your own.

A Few of the Mills That Have Recently Installed Briner Economizers

Price Brothers & Company, Ltd.
Canadian International Paper Co.
Kimberly-Clark Company.
John A. Manning Paper Company
The Viscose Company
Crocker-Burbank Company
St. Regis Paper Company
Scott Paper Company
Beaver Wood Products Company, Ltd.

Note. A number of the companies listed above have installed more than one Briner Economizer, one of these companies having nine now in use.

J. O. ROSS ENGINEERING CORPORATION

Main Office: 30 E. 42nd St., New York City

549 W. Washington Blvd. Chicago, Ill.
79 Milk St., Boston, Mass.
1117 Tacoma Ave., Tacoma, Wash.

ROSS ENGINEERING OF CANADA, LIMITED
New Birks Bldg., Montreal

Heating, Ventilating and Drying Systems For Paper Mills

PAPER TRADE JOURNAL
ESTABLISHED 1872
With Which Is Combined
[redacted]
The Magazine of the Paper Industry
HENRY J. BERGER, Editor

Member A. B. C. Audit Bureau of Circulations

Vol. LXXXII New York, April 1, 1926 No. 13

BUSINESS DEVELOPMENTS REASSURING

The two severe downward reactions in stock prices this month unquestionably present the outstanding financial development of the year to date, states the current issue of the "Guaranty Survey," by the Guaranty Trust Company of New York.

For many months there has been evidence of general belief on the part of the business community that stock values had risen to a higher level than was warranted by the business situation and outlook, and that a downward readjustment was inevitable, the Survey explains. This belief was manifested and at the same time strengthened by the gradually increasing weakness in the security price structure which began with the advance of the discount rates of four Federal Reserve banks last November. Inasmuch as the violent recession in the early days of March was remarkable for its abruptness rather than its actual extent, it was not surprising when renewed weakness appeared later in the month.

The effect of the decline has naturally been to unsettle opinion respecting the future course of the security markets and of general business as well. This effect has been heightened by the weakness recently displayed by prices of commodities, particularly those which enter into speculation on a large scale. From the point of view of the business man, the immediate question raised is whether the market is performing its proverbial function of forecasting business conditions, and accordingly whether the price decline indicates a need for added caution in the assumption of future commitments. From the investor's point of view, the question is whether the owners of capital have temporarily withdrawn from the market in the confident expectation of permanently and material lower price levels.

On the whole it may be said that the month's business developments have been fairly reassuring. Industrial activity is well sustained. Employment has continued to increase. The volume of wholesale and retail trade compares favorably with that of a year ago, despite the adverse influence of extremely cold weather throughout many parts of the country. Commercial bank loans are somewhat larger than at this time last year, and have increased in recent weeks. The movement of railway freight traffic and the amount of payments by check both indicate a level of activity somewhat higher than a year ago. A recent report of the American Railway Association estimates that revenue freight loadings for the first eighteen weeks of this year will surpass by about one-half of one per cent the corresponding total for 1925.

Those who predict a decline in business later in the year base their contentions on the belief that domestic production cannot be maintained at its present high levels; that building activity must decline; that foreign trade factors are unfavorable; that real estate speculation and instalment buying have resulted in some degree of inflation; and that the psychology of a depressed stock market will affect general business, restricting initiative and forcing retrenchment.

Most of the usual indices of business activity and prospects, however, are favorable, and business developments generally are satisfactory, notwithstanding market reactions. It is especially significant that, in spite of the rapid decline in security values and the attendant drastic readjustments, there has been no marked increase in failures, suspensions or other outward signs of financial distress.

There is no doubt that the sharp break in stock prices last week was partly due to the large volume of loans called by bankers. The advent of open weather, with increased demand for funds by interior banks for financing seasonal trade and industrial activity, is a factor that is necessarily temporary. The subsequent return of these funds to Wall Street may have a material bearing on the course of the market later in the season.

AMERICAN WORKER'S "REAL" WAGE

The American Worker's "real" wage, that is the purchasing power of his earningss in buying food and shelter, is still considerably higher than that of the wage earners of any other country in the world. But the gap between the purchasing power of the foreign worker's wages in buying necessaries of life in their respective countries, and those of the industrial workers in the United States has been consistently narrowing during the past year. This is due, according to an analysis made by the National Industrial Conference Board, 247 Park Ave., New York, to increased foreign money wages, or lowered foreign price levels, or both.

A study of foreign wages and their purchasing power made by the Board on the basis of data collected by the International Labor Office of the League of Nations at Geneva for the first nine months of the year 1925, disclosed that, the highest "real" wages prevailed in the United States. The London worker on July 1, 1925, was receiving a little more than half the equivalent of the American "real" wage, an improvement over the beginning of the year 1925, however, when his real wage amounted to less than half that of the American real wage. Canadian and Australian real wages, on the basis of data from Ottawa and Sydney, were higher than London wages throughout 1925 until October, when the last data were collected.

Between January and October, 1925, real wages in all the cities covered by the survey advanced a little closer to the American level but London, suffering a slight decline between July and October, was crowded from third to fourth place by Copenhagen, where the purchasing power of wages was greatly increased by the decline in the cost of living, following the increase in value

of the Danish kroner during the summer months. Norwegian real wages likewise advanced considerably through the advance in value of the Norwegian kroner.

A steady approach of the foreign real wage level to the American level can be traced by the index figures in the following table, which are based on wages, prices of food and shelter, and take into account the working class standard of food consumption in each city named:

Real wages in Foreign Countries and the United States, January to October, 1925.

City	October 1925	July 1925	January 1925
Philadelphia, U. S.	100	100	100
Ottawa, Canada	88	81	69
Sydney, Australia	76	77	70
Copenhagen, Denmark	64	53	41
London, England	53	55	45
Oslo, Norway	52	45	38
Amsterdam, Holland	46	46	37
Stockholm, Sweden	46	40	36
Paris, France	*	*	33
Berlin, Germany	35	34	29
Lodz, Poland	33	33	27
Brussels, Belgium	31	32	28
Prague, Czechoslovakia	31	28	29
Warsaw, Poland	28	28	23
Rome, Italy	*	27	23
Vienna, Austraila	28	26	23
Milan, Italy	26	27	21

*Paris figures for July and October not available; Rome figures for October not available.

To Be General Superintendent of Hawthorne Co.

[FROM OUR REGULAR CORRESPONDENT]

GLENS FALLS, N. Y., March 27, 1926.—Homer E. Stafford, prominently connected with the pulp and paper industry of Northern New York for 35 years and at the present time vice chairman of the Northern New York Division of the American Association of Pulp and Paper Mill Superintendents, on March 20 assumed the general superintendency of the Hawthorne Paper Company, in Kalamazoo, Mich. Mr. Stafford until last fall was general superintendent of Knowlton Brothers' plant in Watertown. He succeeds A. G. Whiteman, who left the Hawthorne plant last September to become superintendent of Knowlton Brothers, following Mr. Stafford's resignation.

Lake Champlain Pulp & Paper Mill Damaged

[FROM OUR REGULAR CORRESPONDENT]

PLATTSBURG, N. Y., March 27, 1926.—The power house at the plant of the Lake Champlain Pulp and Paper Company was badly damaged and some of the equipment ruined when the roof collapsed carrying with it one of the side walls. The accident is said to have been caused by the weight of snow and ice on the roof. More than two tons of bricks fell upon the engine and dynamo, completely wrecking them and causing damage estimated at more than one thousand dollars. The mill was forced to suspend operations as a result of the accident and will be closed pending repairs to the machinery and power house.

Goes With Port Alfred Pulp & Paper Co.

R. J. Schadt who has been director of research at Munising Paper Company, Munising, Mich., has been appointed superintendent of the groundwood mill of Port Alfred Pulp and Paper Company, Port Alfred, Que.

Mr. Schadt's home is in Seattle, Wash., and he is a graduate in chemical engineering of the University of Washington, 1923.

After two years as chemist for Washington Pulp & Paper Corporation at Port Angeles, Wash., he went to Munising Paper Company last year as technical director.

Box Board Production for February

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., March 29, 1926—The Department of Commerce announces February figures on the operations of box board manufacturers, based on reports of 89 firms operating 111 plants. The capacity data in the following table vary according to the normal number of working days in each month, Saturdays, Sundays and holidays being excluded, since the five-day week was adopted by about 80 per cent of the mills.

Year and Month	Operation: Inch Hours Capacity	Operation: Inch Hours Operated	Operation: Per cent of Capacity	Production: Tons Capacity	Production: Tons Output	Production: Per cent of Capacity	Orders received Tons	Unfilled orders (end of month) Tons
1925								
Jan.	7,960,302	8,388,897	105.4	185,619	199,633	107.5	199,649	112,911
Feb.	7,600,440	7,550,968	99.3	177,320	177,292	100.5	162,724	100,403
March	8,360,484	7,569,995	90.5	197,186	179,067	91.0	169,924	90,062
April	8,360,484	7,654,378	91.6	197,186	185,866	94.3	169,914	79,127
May	7,980,462	7,111,776	89.1	188,223	163,956	87.1	175,246	83,415
June	8,360,484	7,983,150	95.5	197,186	190,310	96.5	193,564	92,022
July	8,740,506	8,272,036	94.6	206,149	196,522	95.3	216,013	111,919
Aug.	7,980,462	8,069,721	101.1	188,223	196,527	104.5	211,385	119,248
Sept.	7,980,462	8,152,403	102.2	188,223	198,749	105.6	191,840	109,191
Oct.	8,360,484	8,438,784	100.9	197,186	204,492	103.7	207,178	101,981
Nov.	7,980,462	7,923,058	99.3	188,223	193,140	102.6	195,142	103,304
Dec.	8,360,484	7,936,324	94.9	197,186	190,426	96.6	191,895	105,993
Total	98,025,516	95,051,490	97.0	2,307,910	2,275,980	98.6	2,284,472	.....
1926								
Jan.	7,600,440	*7,808,482	*102.7	179,260	*192,413	*107.3	*207,657	118,531
Feb.	7,600,440	7,664,277	100.8	179,260	191,804	107.0	178,076	104,578

Year and Month	Shipments of boxboard Tons	Stocks of boxboard end of month Tons	Consumption of waste paper: Tons Capacity	Consumption of waste paper: Tons Consumed	Consumption of waste paper: Per cent of capacity	Stocks of waste paper (end of month) Tons: On hand	Stocks of waste paper (end of month) Tons: In transit and unshipped purchases
1925							
January	195,501	52,466	175,938	193,285	109.9	172,382	53,820
February	176,101	53,960	167,910	170,023	101.3	172,456	43,745
March	180,418	51,835	184,778	170,363	92.2	176,035	36,147
April	179,772	57,212	184,778	170,487	92.3	172,223	46,897
May	168,353	53,327	176,379	159,095	90.2	174,726	38,815
June	184,928	59,452	184,778	179,953	97.0	166,467	39,118
July	190,667	64,600	193,177	184,295	95.4	160,099	46,311
August	204,766	55,560	176,379	*188,301	*106.8	149,984	44,359
September	202,599	51,699	176,379	*188,720	*107.0	155,476	49,587
October	213,019	46,054	184,778	*190,779	*103.2	*168,505	48,911
November	193,847	44,541	176,379	*182,176	*103.3	*166,289	46,928
December	189,206	48,468	184,778	*178,729	*96.7	*174,155	37,496
Total	2,279,177	.....	2,166,431	*2,156,206	*99.5	.....	.....
1926							
January	*192,989	47,714	167,980	*182,702	*108.8	*168,459	44,477
February	190,878	48,472	167,980	182,278	108.5	162,382	53,985

* Revised.

Waxed Paper Simplification Committee

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., March 31, 1926.—Word has been received here of the appointment of the following Simplificaton Committee of the American Waxed Paper Association: W. L. Carter, Nashua Gummed and Coated Paper Company, Nashua, N. H.; William J. Eisner, Newark Paraffine and Parchment Company, New York City; and O. M. Porter, secretary of the Association. This committee, it is understood, will work in conjunction with the Simplified Practice Division of the Department of Commerce.

In connection with the simplified program of the paper industry, it is understood that the Binders Board Manufacturers' Association has decided on five stock sizes, a reduction from 718 marketed in 1924. It is said that the jobbers to whom this simplification has been submitted are all in favor of it, and a general conference is proposed to be held in this city, which, however, will probably not be held until next autumn.

LaMotte
H-Ion Roulette Comparator

The Comparator "De Luxe."
Patent Applied For

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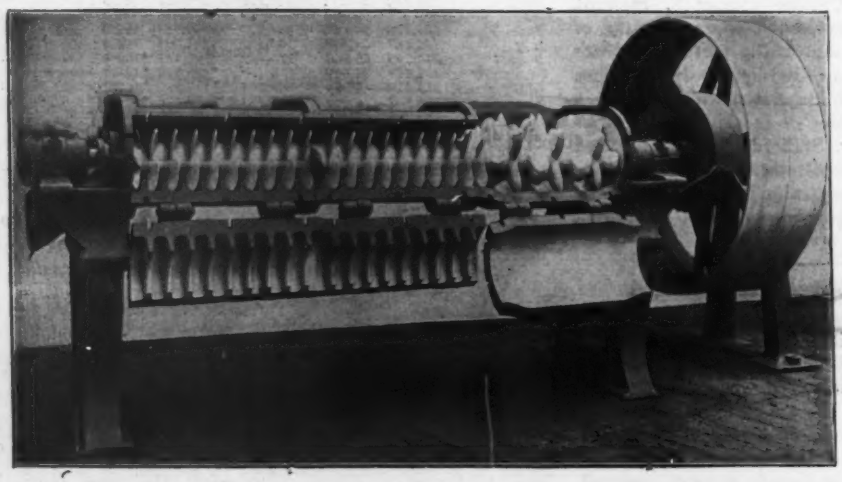
The Color Standards, covering the ranges of any three indicators, such as Bromcresol Purple, Bromthymol Blue and Phenol Red, are placed in the revolving drum, the Color Standards alternating with ampoules of distilled water.

The material to be tested is placed in the three test tubes, shown in the block on the front of the set, and measurements made in the usual manner, revolving the drum until a match with the standards is obtained. The pH value is then read off directly.

Set complete with 40 watt Mazda lamp, ground glass and Daylite screen, 3 sets of Color Standards, 27 ampoules of distilled water; together with 3 bottles of indicator solution, 3-0.5 ml. pipettes, and 18 graduated test tubes in a separate case, f. o. b. Baltimore, Md. **$75.00**

LaMotte Chemical Products Company
McCormick Building — Baltimore, Maryland, U.S.A.

The Voith Kneader
for repulping BROKE, SHAVINGS, OLD PAPER, SULPHITE SCREENINGS, etc.



Disintegrates the material ready for the Jordan or machine chest without further beater treatment.

Requires LESS POWER and LESS LABOR than the broke beater.

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Section of the
Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G. MacNAUGHTON, Secretary

On the Determination of the Strength of Cellulose

By Dr. Fritz Ruhlemann *

At the last general meeting Dr. H. Schwalbe presented an exhaustive report of the researches made by him on the determination of the relative strength of cellulose, using the Lampen ball-mill. In this paper he emphasized the urgent importance of such tests of the strength of different kinds of cellulose to the manufacturer and user of cellulose. Many articles in the journals of the paper trade treating of the classification of cellulose, have told of the especial importance of testing of strength of the cellulose, in connection with the chemical investigation. In America they have gone so far as to require a statement of the strength in making purchases of pulp.

In all the testing methods used up to the present time, hand-made sheets have been used, and, as Dr. Schwalbe points out, only

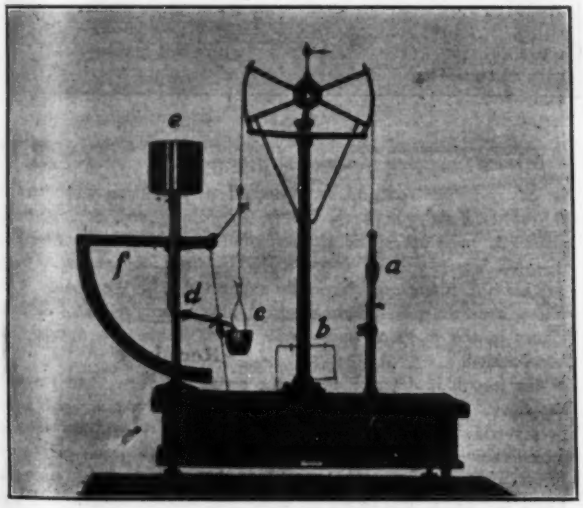

FIG. 1

The "Deforten" tensile strength tester. a. Support for fiber; b. Recorder for elongation; c. Weighing vessel; d. Water supply; e. Reservoir; f. Lever scale.

the relative strength of the celluloses can be determined in this way. This relative strength of a pulp is dependent on three components, that is, the absolute strength of the fibers; their felting property; and the structure, or the relation of the fibers to each other in the whole sheet.

It should be of especial interest to determine in what relation these three components are to each other, and especially the absolute strength of the fibers. A suggestion from Dr. Ernst Muller of Dresden, in February, 1924, induced me to carry on an investigation into the determination of the absolute fiber strength, using the single fibers. Such an investigation has always been considered impossible.

There are no forms of testing apparatus in existence adapted

FIG. 2

Elongation curves (Deforten).

to this problem, the only apparatus for strength-testing known being the Deforten tester for textile fibers of Professor Krais, made by the firm of Hugo Keyl of Dresden.

Experiments with single cotton fibers made on the Deforten tester showed the great sensitiveness of this tester, and the smallness of the loads that may be applied; this is not true of any other forms of apparatus of this character, where the masses to be moved and the friction are too large to fit them for such small measurements.

That cellulose fibers, which are tiny as compared with cotton fibers, have notably smaller strength, is quite evident. It was therefore necessary, in order to select the most satisfactory experimental method, to determine whether the procedure usual with the Deforten tester was appropriate for testing cellulose fibers.

With this point in view, I used for the preliminary experiments first grade bleached pulp, and material which had been kept moist for several years, enclosed in a glass case. The fibers, which had been attacked by the residual chlorine and the germs of putrefaction, were so delicate that they would quickly show any shortcomings in the tester.

* Papier-Fabrikant, Jan. 4, 1926. Address delivered before the general meeting of the Verein der Zellstoff-und Papier-Chemiker und Ingenieure, Dec. 1, 1925. Translated by William P. Cutter for Arthur D. Little, Inc.

Now for a short discription of the Deforten. On a balance beam, at the left, is hung the supporting apparatus, on the right, the vessel to receive the liquid used as a weight. Before the test, the fiber is fastened to a narrow strip of paper of a length corresponding to the desired length of the fiber, and the paper strip clamped into the apparatus so that the fiber was in the line of draft. After cutting the strip of paper with the shears and releasing the beam, the fiber, which is fastened at the lower end, is loaded by allowing distilled water to flow in drops into the receiver. The amount of water required to break the fiber gives the breaking weight of the fiber. The elongation of the fiber is recorded by a pencil on a piece of carbon paper which has a reciprocal motion up and down, the pencil being attached to the balance beam.

FIG. 3

Supporting frame for fiber. German Patent 414,039. a. Length of support; b. Supporting tongues; c. Guide mark.

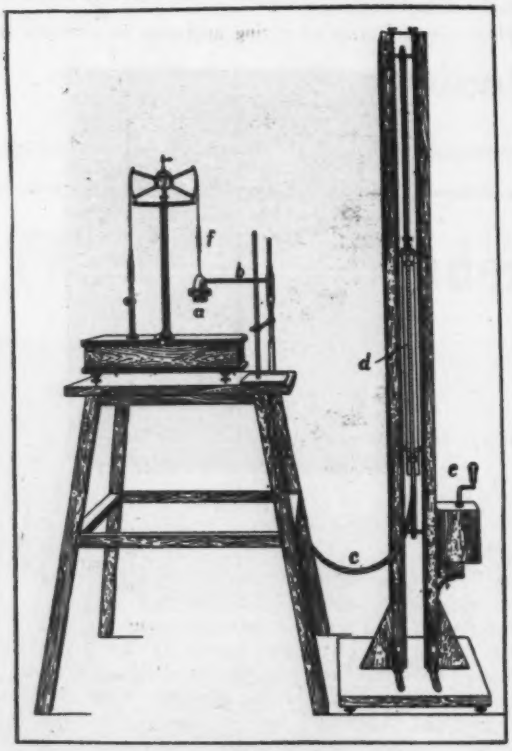

FIG. 4

Apparatus for loading . German Patent 417,103. a. Weighing vessel; b. Siphon; c. Rubber tube; d. Burette; e. Elevating apparatus; f. Spring balance.

The illustration below shows the elongation diagram in zig-zag form, from which the percentage of elongation can be derived, and the progress developed into a curve.

In the strength tests of the cellulose fibers, which are exceedingly small as compared with textile fibers, three questions at once arise:

1. How are the fibers to be selected?
2. What length is to be chosen?
3. How shall the fiber be supported.

The selection of the fiber presents no difficulties, but it must be determined whether to take it from the fresh pulp from the Hollander, or whether dried cellulose, if possible already made into paper, be investigated. In the first case, the single fibers can be easily recognized and separated from the loose structure. In the other case, where the fibers, by felting and drying, closely adhere to each other, the structure must be loosened by soaking in distilled water and by forcible shaking in a measuring cylinder, so that the fibers may be easily separated. In the choice of the fibers, care must be taken to select fibers from as many different places in the mass of pulp to be tested, so that an average may be obtained.

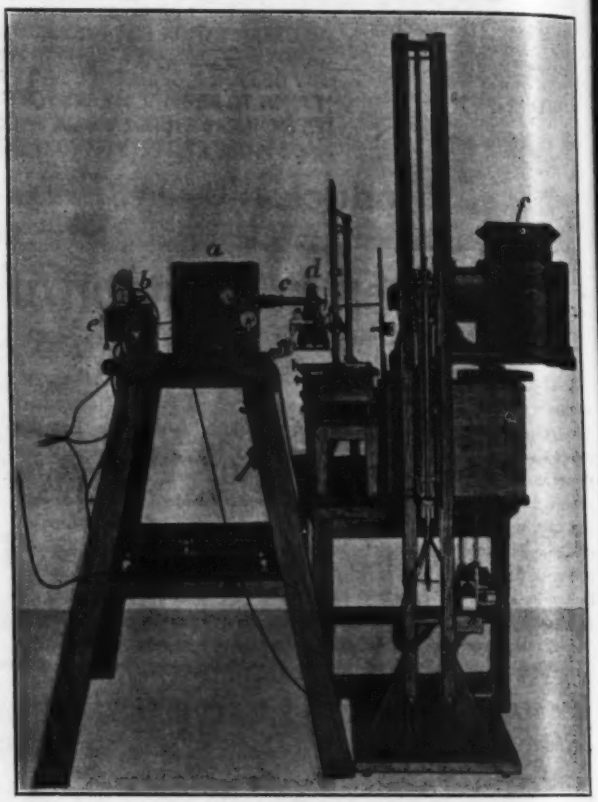

FIG. 5

General arrangement of apparatus. a. Moving picture machine; b. Micro-objective; c. Metronome.

The length is determined by the structure, form, and length of the fiber. The pulp sample to be tested is a mixture of a well preserved short or long fibers and of fiber fragments resulting from chemical or mechanical treatment. The latter are to be rejected in the investigation. The thin-walled fibers of spring wood are easily distinguished from the thicker walled fall wood fibers, the length of the fibers not depending on the wall thickness. Measurements of numerous fibers in a pulp sample, using the Abbe drawing apparatus, gave an avertage total fiber length of 3.4 mm. Bearing in mind that, of a fiber which is pointed at each end, only the uniform middle portion should be taken for the breaking test, and that a certain length at each end is required for attachment, there remains at most a length of 1.5 mm. for testing length.

Since in the selection of fibers without a magnifying glass it is possible to overlook two fibers adhering to each other, all the prepared fibers are examined before the test under a binocular microscope. It is desirable that at the time of this microscopic

examination twisted fibers, and the stronger fall cells be noted on the frame on which the fibers are stretched, so that their behavior may be specially noted. It would not be fair to omit such fibers from the testing unless they are damaged, for they belong to the fiber mixture, from the average strength of which the quality of the cellulose, the effect of the chlorine bleach, and other properties, are to be determined.

Figure 3 shows a frame especially designed for cellulose fibers. It consists of a piece of easily inflammable kino film with segment shaped perforations. By means of a scale photographed on it, a portion of the middle may be removed to allow a test length of fiber varying from 0.5 mm. by half millimeters up to 15 mm. Both sides of the frame, after its insertion in the tester, are not cut away with scissors as in the Deforten, but, in order to prevent the stretching and pushing when scissors are used, are burned through by the use of an electrically heated plantinum needle, and thus a premature fracture of the fiber prevented. As in all strength tests, great stress should be laid on the care in mounting the material to be tested, and special care must be taken in mounting the delicate cellulose fibers. All mistakes due to careless mounting have a much greater effect in a length of sample of 1.5 mm. than in a sample of 20 cm. in length. Experiment has shown that glue is the best substance for fastening fibers. The end of the fibers are first glued, and then, after putting in place, a drop of glue is placed on them. Care must be taken that just ordinary glue is not used, for its chemical composition may affect the fiber. It must have high holding power, must not be hygroscopic, and must above all be free from chemicals which are injurious to the fiber. I use a porcelain cement, which is to be obtained under the name "Kaltoin." It is not wholly proof against 75 per cent of atmospheric moisture, but with 65 per cent of moisture, which is maintained quite constant for all the experiments, it remains sufficiently hard. The frames with the attached fibers should be kept in the testing room to dry for at least twelve hours, and should not be artificially dried more quickly. The guide mark on the frame, the holes in the upper and lower end of the frame, as well as the pins in the clamps of the holder, make possible the exact placing of the fiber in the direction of the pull.

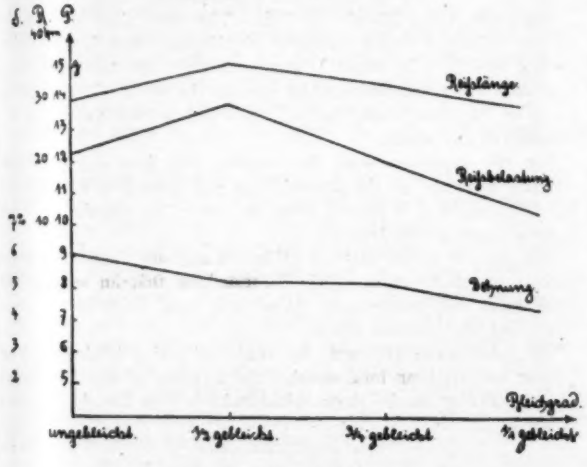

FIG. 6
Curves of Group 1.

In all loading apparatus for strength determinations a constant speed of loading becomes necessary, and this is especially true in fine measurements, such as these. This is assured by the new apparatus shown in Figure 4. Using the principle of communicating tubes, the water from the calibrated burette, which can be elevated or depressed by hand or motor, can be led through the rubber tube and siphon into the weighing vessel, this arrangement makes possible (1) a constant speed of loading; (2) a gradual application of the load, free from shock; (3) reading the load at any time in time units; (4) loading the fiber, or removing the load, at will. With increase of load, and consequent rise in the level of the water in the weighing vessel in order to compensate the effect caused the submerged siphon tube, a spring is inserted in the wire which supports the weighing vessel, which stretches in proportion to the increase of the water level. Errors caused by various physical phenomena, e. g., changes due to the

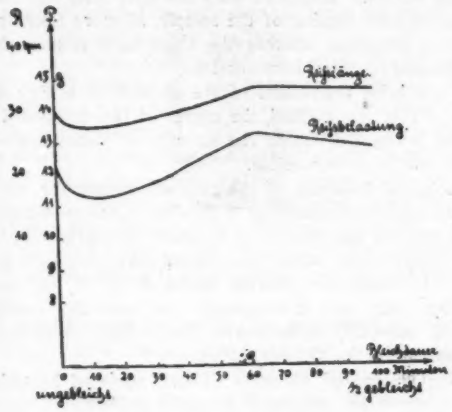

FIG. 7
Curves of Group 1a.

temperature of the water and the evaporation of the water, during the progress of the experiment, may be disregarded, being so small as to have no influence on the end result of any single test. In regulating the speed of loading, it is to be noted that the speed of flow from the burette into the weighing flask is influenced by the diameter of the tube, by friction on the side walls and obstructions where connections are made, at the bends in the siphon, and at the place where the thermometer is inserted. There should be a maximum limit on the rate of flow; in my experiments it was 0.1 gram per second.

It is most difficult to determine the elongation of the single cellulose fibers. The arrangement on the Deforten is not designed for recording magnitudes of a few hundredths of a millimeter. I gave up the idea of using any mechanical method of measurement, on account of the large mass of the parts. It is best to work by optical methods. For lack of suitable objectives, I decided to use the micro-cinematograph of Ernemann to record the elongation, and to calculate it from the projected imake.

Figure 5 shows the arrangement of the testing apparatus. From the beginning of the experiment up to the breaking of the fiber, moving pictures are taken. In order to record the progressive elongations during units of time, it became necessary to mark on the film the time expired. I used a metroname for this purpose, which shut off, every second, the objective with its swinging pendulum, and in this way plainly marked the film. Using thirty meters of film for each measurement, this process is too costly for practical use, and it is too bothersome. After rebuilding the apparatus, I am now in a position to record the progress of the loading and elongation in a diagram made by optical means in the enlargement desired.

I should say something regarding the number of experiments. The large variations in the results of single tests requires a large number of tests to be made in order to arrive at a satisfactory average. I believe these variations to be explainable by certain observations made with the microscope before and after the tests.

Leaving out of consideration the extraordinary difference between the spring and autumn cells, the strength of the cell is influenced by the number and size of the pits in the cell wall, especially by the large unbordered pits, which exist at the points of communication between the cells and the ray cells. Finally, the

increasing rosin content is not without influence. In order to determine how many determinations to make, a previously determined like number of fibers from different pulp samples are tested daily, and the mean taken; although variations from the average will be found to occur, the average itself will not vary at all, or only an amount which may be neglected as unimportant. It will probably be found that the increase in accuracy resulting from making more than 100 tests of each sample will not be great enough to compensate for the increased expense of the work. Therefore for each sample of pulp 100 fiber tests are made, and after two months keeping of the sample, 50 more tests are made, in order to determine whether the fibers have suffered by being kept in alcohol or from fermentation.

After this brief description of the method of testing the fiber strength of this new method, the curves of two completed experiments will prove that testing the strength of single fibers can no longer be said to be impossible.

The cook and bleaching of the pulp to be used for the experiments was carried on according to previously determined standards and under closest supervision, in the plant of a pulp mill, in order to have results which would correspond with practice. First the influence of progressive chloride bleach at 35° C. on bleachable Mitscherlich pulp was investigated, and here the strengths of unbleached, one-half, three-quarter, and wholly bleached fibers were compared. (See Group 1, Figure 6.)

Since the average of 100 tests of each stage of bleaching and

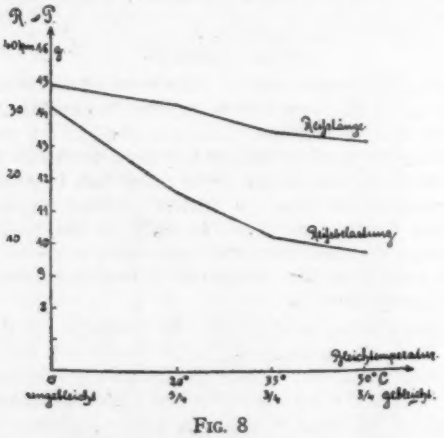

FIG. 8

that obtained by 50 tests made after two months agreed almost exactly, the mean value of the 150 determinations was taken in each case.

Figure 6 shows the curves for breaking length, breaking load, and elongation. It will be noted that the maximum strength of fiber is at one-half bleach, with 13.85 gm. breaking load and 35.46 km. breaking length. With increasing bleach the strength decreases constantly.

A further investigation, on pulp having the same treatment as in the first investigation in the cook and bleaching, was made with the object of establishing a curve for pulp from that unbleached up to that one-half bleached. (See Figure 7.)

This time only 10 kgm. of pulp was bleached in a special vessel, by this means reducing the time of bleaching without affecting the results. The results of the breaking tests were so satisfactory that only 50 tests were necessary to establish an average. Here too the maximum strength is shown by the curve Figure 7 to be at 13.26 gm. breaking load and 32.28 km. breaking length, just before one-half bleach. Although the two investigations differed in the way they were carried out, the breaking tests led to agreeing results.

A third investigation, which shows the reliability of the work of the tester, was carried out on pulp bleached three-fourth at temperatures of 20, 35, and 50° C. The curve in Figure 8 shows when the bleaching temperature is increased, there is a constant decrease in fiber strength. It might be hoped that the bleaching time could be shortened by increasing the temperature, but the fiber strength would be correspondingly decreased.

It would be going too far to base any further theoretical discussion on an inspection of the results of the tests.

A beginning has been made in the investigation of single cellulose fibers. The work connected with this may seem harder than it really is; in spite of the delicacy of the test objects, great dexterity can be acquired in a very short time.

I hope that my experiments on the examination of single fibers may help solve the problem of the classification of cellulose.

February News Print Statistics

Production of news print in the United States during February, 1926, according to the News Print Service Bureau, amounted to 129,622 tons and shipments to 128,635 tons. Production in Canada amounted to 135,663 tons and shipments to 135,505 tons, making a total United States and Canadian production of 265,285 tons and shipments of 264,140 tons. There were also 12,683 tons of news print made in Newfoundland, with 981 tons made in Mexico, so that the total North American production in February, 1926, was 278,949 tons. The news print mills also made 1,214 tons of hanging paper in February, 163 tons of which were made in Canada.

During February the United States mills operated at 95.0 per cent of rated capacity and the Canadian mills at 98.3 per cent.

The United States mills made 11 per cent more in first two months of 1926 than in the same period of 1925 and the Canadian mills made 16 per cent more than in the first two months of 1925.

The combined production of the United States and Canadian mills in first two months of 1926 was 13 per cent more than in same period of 1925.

Stocks of news print at United States mills totaled 14,791 tons at the end of February and at Canadian mills 13,500 tons, making a combined total of 28,291 tons, which was equivalent to 2.5 days' average production.

Rushing Work on St. Helens Mills

[FROM OUR REGULAR CORRESPONDENT]

PORTLAND, Ore., March 25, 1926.—The new plant of the St. Helens Pulp and Paper Company, St. Helens, Ore., is now being rushed rapidly. The steam Silverado brought 300 tons of cement last week from California to be used in the work. The finishing room of the plant is enclosed as concrete has been poured in the columns to this height.

For the machine room the pouring has just started. The concrete is mixed on the ground floor and hoisted to a height of 168 feet, where it is poured from the tower, the gravity carrying in to all parts of the building.

The plant is to be 600 feet in length and 400 feet are now in process of construction. This includes the finishing room, machine room and beater room. Work will next begin on the pulp room and the digester room.

The boiler room will be at the south end and a drilling machine is now making tests to determine the location of the foundation of the 300-foot smoke stack, which will be ten feet in diameter at the top.

Has Good Year in Coated Paper

The annual meeting of Ritchie & Ramsay, Ltd., coated paper manufacturers, Toronto, was held last week, when a very good report on the operations of the past year was presented. George W. Pauline was reelected president and managing director; J. D. Montgomery, vice-president, and John M. Finlay, secretary-treasurer. H. S. Ramsay, son of the late Charles N. Ramsay, (Chairman of the Board, who was one of the original founders of the plant thirty-four years ago) was elected a director of the company.

Report of Committee on Cellulose

By W. E. Byron Baker, Chairman

The Committee on Cellulose came to agreement on a proper outline of its work some time ago. This outline is essentially as follows:

1. Evaluation of pulps, this embracing:
   a. Study of the effect of conditions of cooking on their properties.
   b. Standardization of tests of their purity and adaptability for a particular use.
   c. Correlation of pulp characteristics and wood species.
   d. Chemistry of various pulping processes.
2. Bleaching of pulps, including specifically pulps made from wood, rags, straw and other miscellaneous fibers.
3. Pulp and water relationships, dealing with:
   a. Influence of dissolved matters in water upon the pulp, paper processes and product.
   b. Methods of control and elimination of matter dissolved and suspended in waters.
4. Paper sizing:
   a. Physical aspects of the sizing process.
   b. Chemical aspects of the sizing process.
   c. Control of manufacturing conditions governing results.
5. Paper fillers:
   a. Colloidal relationships as papermaking fibers.
   b. Constitution and properties.
6. Special papers:
   Cellulose chemistry involved in greaseproof, parchment, waterproof, glassine papers, etc., and their processes of manufacture.
7. Cellulose deterioration in pulp and paper.

It will be noted that the scope of the work of the committee is almost unlimited, extending to virtually every step of manufacture. As it was agreed at the outset that theoretical questions as to the cellulose molecular structure and constitution, would not receive attention except where the considerations were of direct and immediate application to manufacture, since the Cellulose Section of the American Chemical Society is dealing with these purely theoretical questions of molecular structure, it is evident that our committee activities should have to do or be concerned with research and study of the deportment of pulp and papermaking fibers.

In *Technical Association Papers* of this year the committee, in connection with Part 1 of the outline, gives a contribution from the Nobel Institute on the Physical Chemistry of Wood Pulp Preparation, by Prof. Dr. Svante Arrhenieco, the distinguished Swedish scientist. This and the brief annotation which accompanies it will surely prove of interest to all engaged in a critical study of pulp manufacture, particularly of kraft and soda pulp. Parallel to this will be published a report on some of the research work carried out on wood and pulp chemistry at the Norwegian Technical University by Prof. Dr. S. Schmidt-Nielsen. This contains also a few references to research work on the sulphite process, and to work on pulp cooking liquors.

Due to the fact that the application of some of the findings set forth can produce higher yields of unbleached sulphite pulp from the wood, a relatively recent contribution to the knowledge of the constitution of spruce wood lignin is also published from a reprint sent by Prof. Dr. Klason to the chairman, as a part of the work outlined under the first caption.

In addition, in reference to Section 1, there will also be presented at this meeting two papers on the subject of the standardization and significance of the alpha cellulose as a means of sulphite pulp evaluation. These papers are by Doctor Bentzen and Doctor Parsons. Inasmuch as the conclusions drawn by these committee members are in some respects at variance, discussion of these papers will prove interesting. The paper on copper number by Mr. Griffin will very likely also prove a source of discussion.

While no paper will be presented on the subject of bleaching at this meeting, a discussion of some of the more recent developments in theory and practice is planned.

In connection with Section 3 of the outline, Doctor Minor will present at this meeting a very interesting paper on Water for Paper. This is a review and discussion of the latest discoveries and experiences along these lines. The physical and colloid chemistry is discussed as applying to a number of phases of the problem.

Time is too limited at this meeting to permit the discussion or presentation of papers on the subjects listed under Sections 4, 5, 6 and 7, but the committee has planned to publish a review of Doctor Lorenz's "Theory and Practice of Rosin Sizing." Time may be available for a brief discussion of a few phases of sizing control.

The committee has planned for the publication of various papers from time to time during the coming year.

Victory Rotary Positive Blowers

The Connersville Blower Company, manufacturers of rotary positive presure blowers, gas exhausters and pumps, of Connersville, Ind., have just issued a revised edition of their bulletin 21, describing the Victory Rotary Positive Blowers, which are applied to many processes.

Victor Blowers are simple, yet sturdy, in their construction. There are no valves, sliding vanes or springs to wear out and become noisy. All parts are given ample metal to assure strength, the headplates and cylinder being ribbed externally and the impellers internally, to make these parts rigid.

Wide faced accurately cut gears, one being mounted on each shaft, time the impellers and also transmit the power from the driving to the driven shaft. Provision is made for these gears to operate continuously in oil in a dust proof oil tight housing, separated from the blower cylinder.

Each shaft is supported by two renewable sleeve bearings mounted in the headplates of the blower. These bearings are machined from a special grade of bearing bronze and are lubricated by rings dipping in large oil reservoirs in the lower part of the headplate.

These blowers are assembled to have the inlet opening at the bottom and to discharge at the top. The reverse can be supplied on special order but is not generally recommended.

Hersee Co. Completes New Plant

Another new Los Angeles manufacturing unit, the Hersee Company's plant, has just been completed by the Austin Company of California.

The structure located on East 60th street between South Park and Central avenue, will be used for the manufacture of paper boxes.

A large amount of new machinery is being installed including high-speed presses and embossing machines. The latest type of box-making machines capable of turning out 5,000 paper boxes an hour, will be added to the equipment. Operations will start with an initial output of approximately 10,000,000 paper boxes a year.

In its new building the Hersee Company will have twice the floor space of the present plant on East Vernon street. The rear wall is of temporary construction and it is planned ultimately to enlarge the new plant to five times the firm's present capacity.

The plant was completed by the Austin Company in fifty working days and represents an investment of $100,000.

Bibliography of Papermaking for 1925

TAPPI Committee on Abstracts and Bibliography, Contribution No. 48

By Clarence J. West, Chairman, and A. Papineau-Couture.

(Continued from last week)

Acidity

Kohler, S., and Hall, G.

Acidity in paper.
Paper Ind. 7, No. 7, 1059-1063 (Oct., 1925); C. A. 20, 286.

Brittleness

Kiely, H. U., and Apelgren, C. E.

Analysis of Bureau of Standards' brittleness tester.
Paper Trade J. 80, No. 6, 219-223 (Feb. 5, 1925); Paper 35, No. 17, 122-124 (Feb. 12, 1925); T. S. 81, 80; C. A. 19, 1628.

Bachmann, A. E.

Weller brittleness tester, an analysis.
Paper Trade J. 80, No. 8, 51-52 (Feb. 19, 1925); T. S. 81, 80; C A. 19, 1628.

Coated Papers

Carson, F. T.

An extractor and friction cleanser. An apparatus for the removal of impregnating and coating materials from processed papers.
Paper Trade J. 80, No. 12, 53-54 (Mar. 19, 1925); Paper 35, No. 17, 39-40 (Feb. 12, 1925); World's Paper Trade Rev. 83, No. 20, 1638 (May 15, 1925); T. S. 81, 89; C. A. 19, 1627.

Fiber Analysis

Bright stain for bleached and unbleached sulphite.
Paper Trade J. 81, No. 8, 48 (Feb. 19, 1925); C. A. 19, 3163.

Foulon,

Milroscopic determination of fibers in paper.
Zellerstoff und papier 5, No. 10, 397-399 (Oct., 1925).

Halse,

Determination of groundwood and sulphite in paper.
Papier 27, 1383-1386 (Dec., 1924); Paper Trade J. 80, No. 16, 49-50 (Apr. 6, 1925); C. A. 19, 1946.

Lee, H. N.

Chemical stains for use in microscopical analysis of paper.
Paper Ind. 6, No. 12, 2155 (Mar., 1925); Paper Trade J. 80, No. 6, 193 (Feb. 5, 1925); Paper 53, No. 17, 110 (Feb. 12, 1925); T. S. 81, 70; C. A. 19, 1946; Paper Makers' Mo. J. 63, No. 8, 303-304 (Aug. 15, 1925).

Korn,

Differentiation of sulphite and soda pulp in paper.
Papierfabr. 23, No. 49, 781-783 (Dec. 6, 1925); Wochbl. Papierfabr. 56, No. 47, 1417-1420 (Dec. 21, 1925); Zellstoff und Papier 5, No. 12, 473-476 (Dec., 1925); World's Paper Trade Rev. 84, No. 25, 1946 (Dec. 18, 1925).

Lofton-Merritt sulphate stain.
Paper Makers' Mo. J. 63, No. 2, 53 (Feb., 1925).

Strachan, J.

Microscopical studies of paper making fibers in relationship to their manufacturing properties.
Paper Makers' Mo. J. 63, No. 7, 262-263, 265, 267; No. 8, 294-296 (July, Aug., 1925); World's Paper Trade Rev. 83, No. 26, 2110, 2112, 2114; 84, No. 1, 42, 44, 46 (June 26-July 3, 1925); T. S. 82, 16; C. A. 19, 3160.

Moisture

Karlberg, R.

Action of moisture of the air on the moisture determination of paper.
Svensk Pappers-Tid. 28, 306-307, 363-365, 388-391 (1925); abstract in Papierfabr. 23, 628; C. A. 20, 289.

Schwalbe, C. G.

Determination of moisture.
Papierfabr. 23, No. 14, 233-234 (Apr. 5, 1925).

Permeability

Carson, F. T.

Testing paper for permeability to liquids.
Paper Trade J. 80, No. 10, 59-62 (Mar. 5, 1925); Paper Maker, Export No., 1925, p. 95-97, 110; Paper Makers' Mo. J. 63, No. 6, 209-212; No. 7, 261-262 (June, July, 1925); T. S. 81, 245; C. A. 19, 1775.

Paper and liquid penetration. Some suggested tests.
World's Paper Trade Rev. 84, No. 20, 1554 (Nov. 13, 1925).

Porosity

Ivanov, N. D.

Porosity of paper.
World's Paper Trade Rev. 83, No. 8, 634 (Feb. 20, 1923).

Stiffness

Schulz, H., and Ewald, W.

The stiffness of paper and its measurement.
Papierfabr. 23, No. 48, 768-770 (Nov. 28, 1923)

Strength Properties

Abrams, A.

Study of the Mullen tester on paperboard.
Paper Trade J. 81, No. 6, 56-39 (Aug. 6, 1925); World's Paper Trade Rev. 84, No. 11, 872 (Sept. 11, 1925); C. A. 19, 3161.

Fenchel,

Apparatus for determining the moisture, stretch and shrinkage in paper.
Zellstoff und Papier 5, No. 1, 20 (Jan., 1925); T. S. 81, 245.

Herzberg, W.

Influence of a high degree of heat upon the strength properties of sack paper.
Wochbl. Papierfabr. 56, No. 46, 1393-1395 (Nov. 15, 1925); Papierfabr. 23, No. 47, 748-759 (Nov. 22, 1925); Zellstoff und Papier 5, No. 12, 482-484 (Dec., 1925); Papier-Ztg. 50, No. 90, 444-3445 (Nov. 11, 1925).

Jacobsen, P. M. Hoffmann

Investigation on folding number.
Papierfabr. 23, No. 1, 7-9; No. 11, 178; No. 36, 573-574 (Jan. 4, Mar. 15, Sept. 6, 1925); T. S. 81, 245.

Jacobsen, P. M. Hoffmann

Some properties of paper.
Papier 28, 895-900 (Aug., 1925); Paper Trade J. 81, No. 21, 49-51 (Nov. 19, 1925); World's Paper Trade Rev. 83, No. 12, 962, 964; No. 13, 1034, 1036, 1038 (Mar. 20, 27, 1925); C. A. 20, 285.

Kohler, S., and Hall, G.

Investigation of the strength of fine paper with special reference to paper of the Swedish government.
Svensk Pappers-Tid. 28, 240-243, 269-273, 303-306 (1925); Papierfabr. 23, 534-535; C. A. 19, 2745.

Reed, E. O.

Folding endurance of paper.
World's Paper Trade Rev. 83, No. 4, 290 (Jan. 23, 1925).

Reed, E. O., and Larson, F. E. A.

Folding endurance test value.
Pulp Paper Mag. Canada 23, No. 4, 97 (Jan. 22, 1925); T. S. 81, 70; C. A. 19, 1948.

Sieber, R.

Mullen and Schopper testers compared.
Papierfabr. 23, No. 39, 617-618 (Sept. 27, 1925); World's Paper Trade Rev. 84, No. 18, 1390 (Oct. 30, 1925).

Snyder, I. W.

Effect of the clamping device of the Mullen paper tester on test results.
Paper Trade J. 80, No. 7, 50 (Feb. 12, 1925); T. S. 81, 80.

Tensile testers.

Paper Trade J. 80, No. 4, 43-45 (Jan. 22, 1925).

Effect of Humidity

Kiely, H. V.

Comparison of paper tests made at various relative humidities.
Paper Trade J. 80, No. 6, 207, 209, 211, 215 (Feb. 5, 1925); T. S. 81, 80; C. A. 19, 1775.

Reed, E. O.

Humidity conditions in testing paper.
Paper Makers' Mo. J. 63, No. 1, 17, 29; No. 2, 50-52 (Jan., Feb., 1925).

Sutermeister, E.

Tearing strength of paper as affected by humidity.
Paper Ind. 7, No. 2, 231-233 (May, 1925); World's Paper Trade Rev. 83, No. 24, 1934 (June 12, 1925); T. S. 81, 246; C. A. 19, 2128.

Surface

Belani, E.

The Goerz Glarimeter.
Papierfabr. 23, No. 45, 723-724 (Nov. 8, 1925).

Lofton, R. E.

The glarimeter and the measurement of the finish of paper.
Paper Trade J. 80, No. 7, 47-49 (Feb. 12, 1925); Paper 35, No. 17, 132, 134, 136 (Feb. 12, 1925); T. S. 81, 80; C. A. 19, 1628; Paper Trade J. 80, No. 16, 58 (Apr. 16, 1925); Zellstoff und Papier 5, No. 6, 216 (June, 1925); World's Paper Trade Rev. 83, No. 20, 1660 (May 15, 1925).

Translucency

Sammet, C. F.

Measurement of the translucency of paper.
Paper Trade J. 81, No. 5, 49 (July 30, 1925); C. A. 19, 3161.

Paper Boards

See Boards.

Paper Specialties

Arnould, E.

The manufacture of coating stock.
L'Industrie Papeterie 4, 266 (Sept., 1925); C. A. 20, 285.

Arnould, E.

Manufacture of featherweight papers.
Papier 28, 963-965 (Sept., 1925).

Arnould, E.

Selection of pulps in the manufacture of paper.
Rev. Univ. Papeterie 7, No. 72, 12-15 (Dec., 1924); Pulp Paper Mag. 23, No. 28, 761-762 (July 9, 1925); T. S. 82, 16; C. A. 19, 2743.

Belani, E.

Cable paper.
Papierfabr. 23, No. 46, 728-729 (Nov. 15, 1925).

Belani, E.

Condenser paper.
Papier-Ztg. 50, No. 3, 80 (Jan. 10, 1925)

Belani, E.

Medicated cotton.
Papier-Ztg. 50, No. 3, 80 (Jen. 10, 1925).

Blotting paper: some notes.

Paper Making 44, No. 2; suppl. iii-iv (Feb., 1925).

Bonnet, G.

Filter mass.
Papier 27, 1167-1170 (Oct., 1924); Paper Trade J. 80, No. 22, 47-48 (May 28, 1925); Papierfabr. 23, No. 1, 6, 7 (Jan. 4, 1925); T. S. 81, 235; T. S. 82, 29.

Cable paper developments.

World's Paper Trade Rev. 83, No. 15, 1231 (Apr. 10, 1925); Pulp Paper Mag. 23, No. 19, 511-512 (May 7, 1925); T. S. 81, 236.

Case lining paper.

World's Paper Trade Rev. 84, No. 13, 990 (Sept. 25, 1925).

Caylus, Elie.

Manufacture of coated printing papers.
Papier 28, 777-782 (July, 1925); Paper Ind. 7, No. 8, 1270-1272 (Nov., 1925); C. A. 19, 3161.

Cunane, T. H.

Printing papers.
World's Paper Trade Rev. 84, No. 25, 1954, 1956-1957 (Dec. 18, 1925).

Filter paper.

Papierfabr. 23, No. 40, 639-641 (Oct. 4, 1925).

Glassine paper.

World's Paper Trade Rev. 84, No. 20, 1524, 1526 (Nov. 13, 1925); Paper Mill 49, No. 49, 24, 28 (Dec. 5, 1925).

Greaseproof packages.

Paper Trade J. 81, No. 2, 32, 34 (July 9, 1925); T. S. 82, 29; C. A. 19, 2744.

Greaseproof and sulphite paper

Svensk Pappers-Tid. 28, 386-387 (1925); C. A. 20, 289.

TECHNICAL SECTION, PAGE 174

Greenhill, David

Offset printing and paper.
World's Paper Trade Rev. 84, No. 7, 514 (Aug. 14, 1925).

Hoyer, F.

How roofing paper is made.
Wochbl. Papierfabr. 55, Nos. 18-19 (1924); Paper 35, No. 11, 450-452 (Jan. 1, 1925); Making Paper 7, 258-263 (Mar., 1925).

Huth, F.

Preparation of marbled papers upon the paper machine.
Zellstoff und Papier 5, No. 11, 440-443 (Nov., 1925).

Huth, F.

Preparation of vulcanized fiber articles.
Papierfabr. 23, No. 39, 621-623 (Sept. 27, 1925).

Interesting papers from Japan.

Pulp Paper Mag. 23, No. 29, 786-788 (July 16, 1925).

Kobbe, W. H.

Sulphurized pulp and paper.
Paper Making 44, No. 1, 36-37 (Jan., 1925).

Koelliker, R. A.

New fire preventative treatment.
Papierfabr. 23; 162-164 (June 18, 1925); T. S. 82, 29; C. A. 19, 3017.

Lambrette, A.

Papier maché compositions.
L'Industrie Papeterie 4, 273-275, 302-308, 337-340 (Sept., Nov., 1925).

Manufacture of glassine paper.

Paper Makers' Mo. J. 63, No. 10, 382-383 (Oct., 1925); Papeterie 46, 1157-1169 (Dec. 25, 1924); Pulp Paper Mag. 23, No. 32, 881-882 (Aug. 6, 1925).

Melville, F. J.

Postage stamp printing.
Paper Mill 49, No. 11, 14, 42 (Mar. 14, 1925).

Micksch, K.

Rendering paper impermeable to water.
Kunstsoffe 14, 122-123 (1924).

Non-inflammable paper.

Papier-Ztg. 50, No. 39, 1568 (May 16, 1925).

Offset printing paper.

World's Paper Trade Rev. 83, No. 1, 46, 48 (Jan. 2, 1925).

Parkert, O. W.

Production of mother-of-pearl irridescent effects upon paper and artificial materials.
Kunstsoffe 15, 169-171 (1925).

Postl, H.

Blotting paper and cardboard.
Papierfabr. 23, No. 36, 578-580 (Sept. 6, 1925); C. A. 20, 288.

Rettori, A.

Furnishes for various papers.
Papeterie 46, 1157-1160 (Dec. 25, 1924); Pulp and Paper Mag. 23, 881-882 (Aug. 6, 1925); Paper Maker, Export No., 1925, p. 104-110.

Roth, W.

Sack paper.
Papierfabr. 23, No. 33, 529-531 (Aug. 16, 1925); C. A. 20, 288.

Somerville, W. D.

Bonds, ledgers and fine papers.
Paper Trade J. 80, No. 23, 55-57 (June 4, 1925); Paper Ind. 7, No. 3, 455, 457, 459 (June, 1925); Paper Mill 49, No. 23, 14, 58 (June 6, 1925); World's Paper Trade Rev. 84, No. 12, 914, 916, 918 (Sept. 18, 1925); T. S. 82, 29.

Special papers.

Zellstoff und Paper 5, No. 3, 89-90 (Mar., 1925).

Specifications for index bristol.

Paper Trade J. 81, No. 12, 50 (Sept. 17, 1925).

U. S. Bureau of Standards.

Inks, typewriter ribbons and carbon paper. (Revised by I. M. Welch). Washington, Govt. Print. Off., 1925. 32 p. U. S. Bureau of Standards, Circular No. 95).
Carbon paper, p. 17; analysis of carbon paper, p. 30-31.

U. S. Bureau of Standards.

Specifications for waterproofed caselining paper.
U. S. Bureau of Standards, Tech. News Bull. No. 100, 7 (Aug., 1925).

Wheelwright, W. B.

The problem of offset paper.
Alfelco facts 3, No. 11, 10-13; No. 12, 8-12 (Mar., Apr., 1925).

Papermaking Materials

See also Bamboo, Cotton stalks, Esparto, Pulpwood, Straw,

Balsac, F. Heim de, Maheu, J., and Cercelet, M.

Sorghum from Madagascar.
Bull. Agence Gén. Colonies 18, 360 (1925); Bull. Imp. Inst. 23, 366 (1925); C. A. 20, 285.

Caroa fiber.

Boll, regia stazione sper. (L'Industria della carta) 4 No. 2, 15-19 (1925); Pulp Paper Mag. 23, No. 30, 811-812, 821 (July 23, 1925); World's Paper Trade Rev. 84, No. 8, 616; No. 9, 684 (Aug. 21, 28, 1925); Papierfabr. 23, 391; T. S. 82, 16; C. A. 19, 2744.

Chow, W. Y., and Sing, Y. T

Experimental paper making.
J. China Soc. Chem. Ind. 3, No. 1, 113-126 (1925); C. A. 19, 2563.

Fombonne, A.

Some Moroccan plants and trees suitable for paper making.
Papier 28, 199-201 (Feb., 1925); T. S. 81, 124.

Heim, F., and Cercelet, M.

Creepers from Indo-China.
Bull. Agence Gen. Colonies 17, 1609 (1924); Bull. Imp. Inst. 23, 366-367 (1925); C. A. 20, 286.

Jufieriew, W., Mileant, M., and Kogan, A.

Reed (*Phragmites communis*) for the Russian pulp manufacture.
Zellstoff and Papier 5, No. 11, 445-446 (Nov., 1925).

Komatsu, S., and Nakajima, G.

Contribution to the process of Japanese paper making (Mulberry).
Mem. Coll. Sci. Kyoto Imp. Univ. 8A, 257-261 (1925); C. A. 19, 2744.

Kranzlein,

Cotton seed hair as paper raw material.
Zellstoff und Papier 5, No. 3, 93 (Mar., 1925); T. S. 81, 124.

Krueger, J. W.

Papyrus plant.
Paper Trade J. 81, No. 26, 28, 30 (Dec. 24, 1925).

Liebeherr, E.

Utilization of saw waste for pulp.
Wochbl. Papierfabr. 56, No. 27, 819 (July 4, 1925); T. S. 82, 16; C. A. 19, 3015.

Michel-Jaffard, R.

Rag substitutes in papermaking.
Papier 27, No. 12, 1413-1419 (Dec., 1924); C. A. 19, 1947.

Papermaking materials.

Bull. Imp. Inst., 22, No. 4 (1925); Paper Makers' Mo. J. 63, No. 4, 139, 149 (Apr., 1925); Paper Maker 69, No. 2, 132b, 132c (Feb., 1925); Paper Trade J. 80, No. 15, 53-54 (Apr. 9, 1925); World's Paper Trade Rev. 83, No. 19, 1534-1536 (May 8, 1925).

Papermaking materials in India.

World's Paper Trade Rev. 83, No. 9, 686-688 (Feb. 17, 1925).

Papermaking materials. Market movements during 1924.

World's Paper Trade Rev. 83, No. 1, 76, 78, 80 (Jan. 2, 1925).

Papermaking materials. Waste cotton balls from Egypt.

World's Paper Trade Rev. 83, No. 9, 732-734 (Feb. 27, 1925).

Papermaking raw materials.

World's Paper Trade Rev. 83, No. 7, 566-568 (Feb. 13, 1925).

Paper production of the Empire. Developing new sources of raw material.
Paper Maker 70, No. 3, 269-271 (Sept. 1, 1925).

Portemont, J. M. de.

The Fournire process for the treatment of grasses.
Papier 28, No. 2, 209-210 (Feb., 1925).

Roots of the sweet wood as raw papermaking material.

Zellstoff und Papier 5, No. 10, 400 (Oct., 1925).

Ruby, A.

Improving the efficiency in manufacture and utilizing waste products in the manufacture of paper.
Papier 27, No. 12, 1391-1409 (Dec., 1924).

Rue, J. D.

Paper industry of the South.
Paper 35, No. 17, 35-38 (Feb. 12, 1925).

Rue, J. D.

Pulp and paper making in the South.
Paper Trade J. 81, No. 3, 59-62, 64 (July 16, 1925); T. S. 82, 30.

Segundo, E. C. de.

Short cotton fiber.
World's Paper Trade Rev. 84, No. 10, 734 (Sept. 4, 1925).

Shaw, M. B., and Rumsey, R. R.

Caroa fiber as a papermaking material.
Paper Trade J. 80, No. 2, 47-49 (Jan. 8, 1925); T. S. 81, 42.

Strachan, J.

Domestic raw materials neglected by the British papermaker.
Proc. Tech. Sect., P. M. Assoc. Gt. Brit., Ireland 5, pt. 2, 183-187 (Mar., 1925).

Sullivan, W. H.

Future of the South as a pulp and paper source.
Paper Mill 49, No. 32, 1, 8 (Aug. 8, 1925).

Sweeney, O. R.

Utilization of corncobs.
Iowa State College, Eng. Expt. Sta., Bull. No. 73 (Sept. 10, 1924); 111p. See T. S. 82. 17.

Thiriet, A.

French colonial cellulosic fibers.
Chimie et industrie, Special No. 498-507 (Sept., 1925).

Parchment Papers

Arnould, M.

Parchment paper process.
Making Paper 7, No. 8, 226-231 (Feb., 1925); Paper Maker Export No., 1925, p. 98-101; 69, No. 5, 501-502; 70, No. 3, 293-295 (May, Sept., 1925).

Belani, E.

Preparation of pergamyn paper.
Zellstoff und Papier 5, No. 3, 90-91 (Mar., 1925).

Fachmann, —.

Testing pergamyn paper for addition substances.
Papier-Ztg. 50, No. 54, 2102 (July 8, 1925).

Groud, C.

Parchment paper.
Papier-Ztg. 50, No. 65, 2508-2510 (Aug. 15, 1925).

Huth, F.

Preparation of parchment paper.
Papierfabr. 23, No. 25, 397-399 (June 21, 1925); T. S. 82, 30.

Huth, F.

Testing of parchment paper.
Papierfabr. 23, No. 6, 73-74 (Feb. 8, 1925); C. A. 19, 1628; T. S. 81, 245.

Postl, H.

Parchment and vulcanized fibre.
Paper Makers' Mo. J. 63, No. 3, 93-95; No. 4, 131-134 (Mar., Apr., 1925).

Serve-Briquet, —.

Concentration of spent sulphuric acid liquor from paper parchmentizing plants.
Papier 27, 1421-1424 (Dec., 1924); Pulp Paper Mag. 23, No. 26, 695-696 (June 25, 1925); T. B. 82, 29; C. A. 19, 1946.

Testing parchment paper.

Papierfabr. 23, No. 31, 502 (Aug. 2, 1925).

Pentosans

Gierish, Walter.

Pentosan determination in wood.
Cellulosechemie 5, No. 5, 61-74; No. 6, 81-93 (June 21, July 12, 1925); T. S. 81, 255; C. A. 19, 3072; 20, 110.

Klingstedt, F. W.

Determination of pentosans.
Z. anal. Chem. 66, 129-160 (1925); T. S. 81. 254.

Photographic Papers

Bentzen, T.

Baryta paper.
Paper Trade J. 80, No. 6, 195-197, 199, 203 (Feb. 5, 1925); Paper 35, No. 17, 104, 106, 108, 110 (Feb. 12, 1925); Paper Mill 49, No. 8, 4, 10A (Feb. 21, 1925); T. S. 81, 100.

Bentzen, T.

The colloids and the formation of white spots in photographic emulsion papers.
Paper Trade J. 80, No. 13, 45 (Mar. 26, 1925); World's Paper Trade Rev. 83, No. 22, 1784 (May 29, 1925); T. S. 81, 230.

Jarrell, T. D., and Veitch, F. P.

Effect of temperature and time of storage on the physical properties of undeveloped brown print paper.
Paper Trade J. 80, No. 20, 56-57 (May 14, 1925); T. S. 82, 29; C. A. 19, 2128.

Press Rolls

Adams, R. B.

Rubber rolls and deckle straps.
Paper Mill 49, No. 3, 8, 10, 44 (Jan. 17, 1925); World's Paper Trade Rev. 83, No. 11, 882-884; No. 12, 970-972 (Mar. 13-20, 1925); T. S. 81, 110.

Adams, R. B.

The use of rubber covered rolls.
Paper Mill 49, No. 42, 14-16 (Oct. 17, 1925).

Belani, E.

Study of the flattening of paper in the machine.
Papierfabr. 23, No. 2, 20-22 (Jan. 11, 1925); T. S. 81, 237.

Bouvier, V.

Dandy rolls.
Papier 27, 1149-1154 (Oct., 1924); Zellstoff und Papier 5, No. 4, 128-130 (Apr., 1925).

Crowning of paper machine rolls.

Super-Calender, Dec., 1924; Pulp Paper Mag. 23, No. 27, 737-738 (July 2, 1925).

Grinding crowns.

Super-Calender, 14, No. 6, 624-625 (Mar., 1925).

King, C.

Soft rubber rolls.
Pulp Paper Mag. 23, No. 20, 531-532 (May 14, 1925); T. S. 81, 237.

Rees, E. A.

Press rolls and water removal.
Pulp Paper Mag. Intern. No., 1925, 131-136; T. S. 81, 110.

Rubber covered press rolls.

Super-Calender 14, No. 10, 631-636 (May, 1925).

Upper press rolls.

Super-Calender 15, No. 3, 658-659 (Oct., 1925).

Whitney, R. H.

A new rubber covering for felt carriers and tube rolls.
Paper Ind. 7, No. 4, 599 (July, 1925); Zellstoff und Papier 5, No. 8, 306 (Aug., 1925).

Whitney, R. H.

The slip sleeve.
Paper Mill 49, No. 24, 22-24 (June 13, 1925); World's Paper Trade Rev. 84, No. 2, 100-102 (July 10, 1925).

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Power

See also Electricity in paper making.
Paper Ind. 7, No. 5, 752-753 (Aug., 1925).

Armantrout, L. L.

Standardizing power production in the paper mill.
Paper Ind. 7, No. 5, 752-753 (Aug., 1925).

Armantrout, L. L.

Standardizing power production in the paper mill. I. Power distribution and efficiency. II. Daily power cost record.
Paper Ind. 7, No. 7, 1068-1070; No. 8, 1235-1238 (Oct., Nov., 1925).

Barnes, B. L.

Power factor correction.
Pulp Paper Mag. 23, No. 45, 1269-1273 (Nov. 5, 1925).

Belani, E.

Preheating air combustion purposes in the boiler plants of the pulp and paper industry.
Papierfabr. 23, No. 4, 50-53; No. 5, 6670 (Jan. 25-Feb. 1, 1925); T. S. 81, 244.

Belani, E.

The principle of the "Wels" drive and its application in hollander construction.
Wochbl. Papierfabr. 56, No. 41, 1256-1257 (Oct. 10, 1925).

Bowman, H.

Power transmission.
Paper Mill 49, No. 13, 32 (Mar. 28, 1925).

"Calor".

Use of waste heat for heating buildings.
Papeterie 47, 50-54, 154-158, 206-209, 258-261 (Jan. 25-Mar. 25, 1925); T. S. 81, 244.

Carrier, W. H., and Madison, R. D.

Fan engineering. 2nd. ed. Buffalo Forge Co., 1925; 612 p.

Comee, E. R.

Pulverized coal system of Pejepscot.
Paper Ind. 7, No. 7, 1097-1098 (Oct., 1925).

Coutant, J. G.

Good efficiency and high rating with unit type pulverizers.
Pulp Paper Mag. 23, No. 14, 363-364 (Apr. 2, 1925).

Evans, H. C.

Maintaining furnaces in the paper mill.
Paper Trade J. 80, No. 3, 47-50 (Jan. 15, 1925). T. S. 81, 108.

Golbs, G. H.

Power requirements of the paper machine.
Wochbl. Papierfabr. 56, No. 44, 1335-1338; No. 47, 1421-1424; No. 49, 1481-1484; No. 51, 1550; No. 52, 1592-1595 (Oct. 31, Nov. 21, Dec. 5, 12, 26, 1925).

Groundwater, A. G.

Steam boilerhouse management.
Proc. Tech. Sect., P. M. Assoc. Gt. Brit. Ireland 5, pt. 2, 173-181 (Mar., 1925).

Hargreaves, W.

Boilerhouse efficiency.
World's Paper Trade Rev. 84, No. 25, 1966, 1968, 1970, 1972 (Dec. 18, 1925).

Heat losses in the paper industry and its curtailment.

Wochbl. Papierfabr. 56, No. 8, 220-223; No. 16, 494-496 (Feb. 21, Apr. 18, 1925); T. S. 81, 190.

Huc, E.

Boiler feed water purification.
Papier 28, 405-409 (Apr., 1925).

Huc, E.

Rational utilization of exhaust steam.
Papier 27, 1213-1223 (Nov., 1924).

Huwiler, A.

The Schwartzkopff-Huwiler drive in the paper industry.
Papierfabr. 23, No. 49, 792-796 (Dec. 6, 1925).

Ingraham, H. G.

Balancing power and process steam in paper mills.
Power 62, 474-478 (Sept. 29, 1925).

Ingraham, H. G.

Remodeled power plant of the National Paper Products Co.
Paper Ind. 7, No. 6, 915-917 (Sept., 1925).

Isnard, R.

Power economy in papermaking.
Papier 27, 1293-1302 (Nov., 1924).

Landor, H.

Progress in the field of mechanical transmission with special reference to the paper industry.
Wochbl. Papierfabr. 56, No. 9, 268-271 (Feb. 28, 1925).

Leeper, R. W.

Power problem.
Paper Mill 49, No. 25, 4-18 (June 20, 1925); Paper Trade J. 80, No. 24, 55-57 (June 11, 1925).

Leeper, R. W.

Steam prime movers for the paper mill.
Paper Trade J. 80, No. 6, 146-149 (Feb. 5, 1925); T. S. 81, 108.

Leiner, —.

Coal, oil and water power.
Wochbl. Papierfabr. 56, No. 41, 1233-1239 (Oct. 10, 1925).

MacNaughton, W. G.

Dr. Ruths steam accumulator systems inspected.
Paper Trade J. 81, No. 20, 47-48 (Nov. 12, 1925).

Mallinson, A. B.

Justifiable small power plants.
World's Paper Trade Rev. 83, No. 16, 1330, 1332, 1334 (Apr. 17, 1925).

Mallinson, A. B.

Steam and power in the paper mill.
World's Paper Trade Rev. 83, No. 18, 1470, 1472, 1474 (May 1, 1925); Paper Mill 49, No. 21, 44-46 (May 23, 1925).

Marchaud, M.

The Ruths steam accumulator in the paper industry.
Papier 27, 1107-1116 (Oct., 1924).

Newcomb, C. S.

Paper mill power drive and motor control layout.
Ind. Eng. 83, 510-516 (Nov., 1925).

Rack, E. C.

Heat insulation in the pulp and paper industry.
Paper Mill 49, No. 42, 20-22 (Oct. 17, 1925); Pulp Paper Mag. 23, No. 46, 1313-1315 (Nov. 12, 1925).

Ruths heat accumulator.

Papierfabr. 23, No. 27, 433-436 (July 5, 1925).

Ruth's steam accumulator in the paper industry.

Zellstoff und Papier 5, No. 1, 14 (Jan., 1025).

Schenker, J. E.

Speed reducers.
Papier Ind. 6, No. 10, 1752-1753 (Jan., 1925).

Schiebuhr, F.

Power of paper machines, calenders and grinders from liquid drives.
Papierfabr. 23, No. 49, 787-792 (Dec. 6, 1925).

Shays, J. R.

Speed reducers—their advantages and applications in the paper industry.
Paper Mill 49, No. 42, 24-26 (Oct. 17, 1925); Paper Trade J. 81, No. 16, 51-53 (Oct. 15, 1925).

Sheehan, A. F.

Generated or purchased power in the paper mill.
Power 62, 539-540 (Oct 6, 1925).

Spratt, W. W.

Power costs in paper mills.
Paper Mill, 49, No. 20, 18; No. 21, 18-20 (May 16-23, 1925).

Taylor, A. J. T.

Application of the Ruths Accumulator in the pulp and paper industry.
Paper Ind. 6, No. 12, 2127-2134 (Mar., 1925); Pulp Paper Mag. 23, No. 3, 63-72 (Jan. 15, 1925); Paper Trade J. 80, No. 5, 49-58 (Jan. 29, 1925); T. S. 81, 108.

Taylor, A. J. T.

The Ruths steam accumulator.
Paper Trade J. 81, No. 26, 43 (Dec. 24, 1925).

Taylor, A. J. T.

Developments in steam power plant equipment for the modern paper mill.
Paper Ind. 7, No. 3, 385-392 (June, 1925).

Van Sothen, C. E. H.

Automatic hydro-electric generating stations.
Paper Mill 49, No. 1, 4; No. 2, 14-16; (Jan. 3-10, 1925).

Worker, J. G.

Saving fuel by preheating air for furnaces.
Paper Trade J. 81, No. 23, 60 (Dec. 3, 1925).

Printing and Paper

King-Smith, R.

Papermaker and the printer.
World's Paper Trade Rev. 83, No. 18, 1440-1442, 1444, 1446 (May 1, 1925).

Moisture in paper and its effect on ink.

Pulp Paper Mag. 23, No. 15, 120 (Jan. 29, 1925); Alfelco Facts 3, No. 9, 8-11 (Jan., 1925); T. S. 81, 68; World's Paper Trade Rev. 83, No. 20, 1658-1660 (May 15, 1925).

TECHNICAL SECTION, PAGE 178

Pollock, W. J.

Printer's difficulties with paper.
Paper Maker 69, No. 4, 389-390 (Apr., 1925).

Reed, R. F.

Characteristics of paper and their relation to lithography.
Paper Trade J. 81, No. 27, 45-46 (Dec. 31, 1925).

Riddell, J. R.

The printer and his paper.
World's Paper Trade Rev. 83, No. 14, 1108, 1110, 1112; discussion, *Ibid* 1166, 1168, 1170, 1172, 1174, 1176 (Apr. 3, 1925); Paper Maker 69, No. 4, 387-389 (Apr., 1925); Paper Makers' Mo. J. 63, No. 4, 141-142 (Apr., 1925); T. S. 81, 236.

Pulp Analysis and Testing

Arnot, J. M.

Determination of moisture in pulp. (Use of calcium carbide).
World's Paper Trade Rev. 83, No. 18, 1500 (May 1, 1925).

Beating tester of Schopper-Riegler in practice.
Wochbl. Papierfabr. 56, No. 16, 488-489 (Apr. 18, 1925).

Bentzen, T.

Calculation of the airdry weight of wood pulp.
Paper Ind. 7, No. 8, 1239-1240 (Nov., 1925).

Brecht, W.

Several physical properties of a sulphite pulp fiber suspension.
Wochbl. Papierfabr. 56, No. 24A, 36-42 (June 13, 1925); T. S. 82, 17; C. A. 19, 3016.

Cameron, E. P.

Proposed standard method for the testing of pulp for strength (non-beating test).
Pulp Paper Mag. 23, No. 10, 250-251 (Mar. 5, 1925); T. S. 81, 190; C. A. 19, 1775.

Cameron, E. P.

Report of sub-committee on the standardization of the freeness test.
Pulp Paper Mag. Intern. No., 1925, 155-157; Paper Mill 49, No. 6, 193-198 (1925); C. A. 19, 1775.

Crolard, J.

Unbleached and easy bleaching pulps (Lignin and chlorine values).
Mon. Papeterie Francaise 56, 156-158 (Apr. 1, 1925); T. S. 81, 190; C. A. 19, 1946.

Degree of delignification of chemical pulps.
Papier 28, 325-326 (Mar., 1925); Paper Trade J. 80, No. 26, 49 (June 25, 1925); T. S. 81, 190.

Dickson, W.

Quantitative determination of cotton, linen and wood fibers in paper pulp.
Paper Makers' Mo. J. 63, No. 8, 297-300 (Aug., 1925); Analyst 50, 317-325 (1925); C. A. 19, 3016.

Fleury, E.

Cooking of sulphite pulp.
Paper 35, No. 16, 663-665 (Feb. 8, 1925).

Fleury, E.

New method of control of sulphite pulp cooking.
Pulp Paper Mag. 23, No. 4, 106 (Jan. 22, 1925); Paper 35, No. 12, 512 (Jan. 8, 1925); Can. Chem. Met. 9, 16-18 (1925); C. A. 19, 1054.

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Genberg, G. P.

Strength testing of chemical wood pulp.
Paper Trade J. 80, No. 6, 177 (Feb. 5, 1925); Paper 35, No. 17, 84 (Feb. 12, 1925); C. A. 19, 1628; T. S. 81, 70.

Graff, J. H.

Pulp weight factors.
Paper Trade J. 80, No. 8, 49-51 (Feb. 19, 1925).

Hall, G.

Standard methods of testing wood pulp for strength.
Paper Trade J. 81, No. 4, 45-49 (July 23, 1925); C. A. 19, 3160.

Jacobsen, P. M. Hoffmann.

New method for determining the strength of chemical pulps.
Papier 28, 877-880 (Aug., 1925); Paper Trade J. 81, No. 22, 52-53 (Nov. 26, 1925); Papierfabr. 23, No. 45, 717-718 (Nov. 8, 1925); Wochbl. Papierfabr. 56, No. 48, 1454-1456 (Nov. 28, 1925); C. A. 20, 286.

Jacobsen, P. M. Hoffmann.

New quantitative method for determining beating effects.
World's Paper Trade Rev. 83, No. 6, 434, 436, 438 (Feb. 6, 1925).

Keay, H. O.

Disk method of log sampling for moisture test.
Pulp Paper Mag. Canada 23, No. 29, 796-797 (July 16, 1925); C. A. 19, 2744.

Neumann, R.

Schopper-Riegler beating tester.
Papierfabr. 23, No. 30, 480-483 (July 26, 1925).

New pulp-sampling tool.
Paper Trade J. 81, No. 24, 44 (Dec. 10, 1925).

Rieth, K.

Testing strength of pulp.
Papierfabr. 23, No. 33, 525-529 (Aug. 16, 1925); C. A. 20, 288.

Schopper-Riegler beating tester.
Wochbl. Papierfabr. 56, No. 45, 1364-1365; No. 46, 1395-1397 (Nov. 7-14, 1925).

Schwalbe, C. G.

Dryness determination of fibers.
Papierfabr. 23, 233-234 (Apr. 5, 1925); Hauptversammlung, Verein der Zellstoff- und Papier-Chem.-Ing., 1924, 121-123; T. S. 81, 230; C. A. 19, 2127.

Schwalbe, C. G., and Feldtmann, G. A.

Simple method for determining the sedimentation volume of pulps.
Wochbl. Papierfabr. 56, No. 9, 251-256 (Feb. 28, 1925); T. S. 81, 190; C. A. 19, 2129.

Schwalbe, H.

Determination of the relative strength of pulp by the Lampén ball mill.
Papierfabr. 23, No. 14, 234-241 (Apr. 5, 1925); Hauptversammlung, Verein der Zellstoff- und Papier-Chem-Ing., 1924, 132-150; Zellstoff und Papier 5, No. 4, 126 (Apr., 1925); T. S. 81, 245; C. A. 19, 2130.

Schwalbe, H.

Determination of rosin and fat in pulps.
Papierfabr. 23, No. 15, 246-247 (Apr. 12, 1925); Hauptversammlung, Verein der Zellstoff- und Papier-Chem-Ing. 1924, 155-160; Zellstoff und Papier 5, No. 5, 169 (May, 1925); World's Paper Trade Rev. 84, No. 2, 124-126, (July 10, 1925); T. S. 81, 245; C. A. 19, 2130.

(To be continued)

Section of the

COST ASSOCIATION OF THE PAPER INDUSTRY

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Interpretation of Financial Statement*

By John R. Wildman

Financial statements, as instruments of service to business, have probably attained a place of more importance in the United States than in any other nation in the world. In no country is a greater effort being put forth in an endeavor to interpret and utilize financial information in the conduct of business affairs. The fields served by financial statements include credit, investment, administration and management, government, engineering, law and accountancy. Such information is used also in relation to contracts of operation, business transfers, fiduciary integrity, bankruptcy and receivership and business reorganization.

To Determine Significance

The problem of interpretation is to determine significance. The problem of interpreting financial statements is concerned with determining (first) What are the representations made by means of the statements? (second) If the representations are true, what is their significance?

An unqualified item of merchandise inventory appearing among the current assets in a balance sheet is a representation which custom fairly well has established that the goods are sound and salable, and that they have been valued at the lower of cost or market. The significance is that the amount invested in such goods may be expected, within a period of time consistent with the credit terms, money conditions and average efficiency in making collections, to pass with the addition of profit through the form of accounts receivable into cash which will be available for the liquidation of current liabilities.

The significance of a merchandise inventory may be obscured if some other item in the balance sheet affecting the inventory is not shown in relation thereto or clearly described in order that it may be so related by an interpreter of the balance sheet. An interesting case which arose recently presented a situation in which a company was obligated under contract to make certain future deliveries at a loss. Materials had been bought on a rising market to be used to manufacture the goods for delivery under the contract, with no possibility of procuring other materials to substitute at a lower price. It was known that the loss would amount to a large sum and that it would fall on certain materials in the inventory which were carried at the lower of cost or market.

In the practical controversy which ensued over the representations in the balance sheet, three different positions were taken by different parties as to a reserve which had been created through a charge against surplus for the purpose of anticipating the loss. One party contended that it was a current liability. The second party held that it was a general reserve, on the ground that surplus had been charged and that as long as creditors were thereby protected against the paying out of cash as dividends while they waited for settlement of their accounts every necessary purpose had been served. The third party insisted that the reserve should be deducted from the inventory item, inasmuch as there would be less in the way of value with which to satisfy creditors than appeared in the current asset group.

The last view appears to be the correct one. The reader of the balance sheet is entitled to understand from the inclusion of a merchandise inventory item in the current asset section that when the inventory shall have been converted into cash it will be at a greater rather than a lesser value. While such goods as inventory should contain no element of profit, after having been turned over the cash resulting will carry an item of profit. Thus he concludes that more rather than less will be available to satisfy current creditors.

Ways of Developing Significance

There are various ways of developing significances. Consider the much neglected income statement. Instead of the conventional additions and subtractions of figures leading to a result which merely ties the surplus into the balance sheet, you may see therein some of the reflections of operating and general and financial management. Particularly, if you will reduce the figures to a dollar basis, you may see how the dollar receivable from customers has been divided among the parties who contributed to the cost of the goods or services supplied to such customers. If your imagination will permit: First, there is the supplier who furnished the materials; next, there are workmen who fashioned the goods; then, the salesmen who sold them; clerks who kept the records; managers who administered the enterprise; parties who lent their money; those who furnished property or service facilities; the government which enacted a tax; capital invested in property which wore out and had to be replaced; other capital losses, and, last, the profit which went to the proprietor—fanciful, no doubt, but interesting, and perhaps a concept which some day will be developed and elucidated so as to be extremely useful as a means of interpretation.

Significances such as our minds are capable of grasping at the present time are suggested principally by comparisons of various kinds. One may compare current figures with similar figures of prior periods; or figures of one enterprise with like figures of a similar enterprise; or specific figues with various standards. Thus may be indicated the trends of various activities and the efficiency of those responsible for the direction of them. The cost of the goods may be getting out of proportion to the profit. Selling expenses may be too high. The margin of operating profit may not be sufficient to sustain the load of property expense. The

* From Journal of Accountancy.

net profit factor indicating the percentages taken out of the enterprise may show that some of the profit should have been left in to be devoted to strengthening the organization and assuring its future. In one instance statistics of this character drew sharply into the foreground an expense for borrowed money which was excessive. Investigation disclosed the fact that working capital was being obtained through hypothecation of accounts receivable at interest rates of 24 per cent per annum.

Interpretation of Surplus

Returning to the balance sheet, perhaps one of the most difficult items thereon to interpret is the one frequently designated as surplus. The significance of surplus, in the absence of qualification, is that it is an accumulation of profits resulting from operations and in the discretion of directors may be declared away as dividends. The consideration of surplus raises a number of interesting questions. One of these questions is: May anything other than profits arising from operations be considered surplus which is subject to the declaration of dividends. In other words, may a corporation write up its property values on the basis of an appraisal or on the judgment of directors as to value and credit an amount equal to the increase in value to the surplus account, subsequently declaring a dividend out of such surplus? If this is permissible, may not the same reasoning and formula be applied to capital stocks of other corporations carried as investments? In the case of a wholly owned subsidiary with a surplus of its own, what is to prevent the holding company from revaluing its investment on the basis of the book value of the subsidiary and crediting the increase in value to surplus? Again, in a case where preferred shares of other corporations are carried as investments at a cost which is less than par, why may not the holding company carrying this investment write their value up to par and take into surplus the amount of the increase in value?

A Leading Case

The leading case on this question is Williams v. Western Union Telegraph Company, 93 N. Y. 162. In this case the court defined surplus as the excess of assets over liabilities and capital. After this definition, the decision continues: "Such surplus belongs to the corporation and is a portion of its property, and in a general sense may be regarded as a portion of its capital, but in a strictly legal sense it is not a portion of its capital and is always regarded as surplus profits."

Without devoting too much time to this question it appears that from a legal point of view any excess assets over liabilities and capital may be regarded as surplus profits. This concept, however, is attended by certain dangers from the point of view of business policy, in that there is considerable question as to the soundness of declaring dividends payable in cash out of surplus represented by unrealized profits. Obviously, it must be admitted that such course would be legal and that a way might be found to obtain the cash with which to make the payment of dividends. In view, however, of the accounting differentiation between surplus derived from profit on operations and that rising from revaluation of assets, any surplus item appearing on a balance sheet is subject to investigation. From a credit point of view, this matter iis important, since it is related to the appropriations for dividend purposes of cash which more properly should be applied to the liquidation of current liabilities.

Various State Laws

A second point for consideration in relation to surplus is the effect of various state laws permitting the issuance of shares without par value. In some states, apparently, there is serious conflict between the law on one hand and economic principles, good accounting and rational business administration on the other. The Maryland laws governing corporations, for example, permit the issuance of both preferred and common shares without par value, for such consideration as may be fixed by the board of directors or by the charter of the corporation. The state of Delaware, likewise, permits corporations to issue shares of capital stock, both common and preferred, without nominal or par value, for such consideration as may be fixed from time to time by the board of directors. Thus, it becomes possible for a corporation to issue its shares, receive large sums of cash in exchange therefor, credit some nominal amount per share to capital and place the remainder in the surplus account. There may be no question that this procedure is legal when properly authorized by action of the directors, and in all probability surplus so derived might be appropriated later for dividends. There is grave doubt that any reputable and well meaning corporation consciously would subscribe to the policy of paying dividends out of capital, yet the way seems to be open by the laws in some states, and if surplus so derived is not segregated, directors may unwittingly declare dividends therefrom.

Must Give Serious Consideration to Surplus

The point at issue is that any attempt to interpret a balance sheet must give serious consideration to the item of surplus. The casual reviewer is not justified as he should be in assuming that surplus unqualified by further description has been earned and may be appropriated for dividends, if sufficient in amount, without detriment to the creditors. Good accounting practice has adopted the policy of earmarking surplus derived in ways other than from earnings, in order that there may be a clear understanding as to the surplus available for dividends. These segregated items have been described in various ways by different accounts as capital surplus, as surplus arising from revaluation of assets, or as surplus representing the excess of capital received for shares of stock in excess of the stated value thereof. While perhaps inconsistent with the principles of accounting, nevertheless a surplus item not otherwise described is open to challenge as to its origin. In a somewhat recent offering, common shares were shown on the balance sheet at a nominal value of ten cents each, while the remainder of the proceeds of sale was merged with other surplus from earnings and revaluations and constituted about 50 per cent of the total surplus item. Only a person with knowledge of facts beyond those disclosed by the balance sheet could have determined the relative amount of capital surplus involved.

Analysis of Items

Analysis of items which appear in financial statements is another means of bringing out significances. Analysis sometimes discloses strange bedfellows. In the balance sheet of an average sized industrial company, marketable securities were shown as a current asset. The line of cleavage between current and fixed assets in the matter of investments long since has been established. According to the general accepted practice, securities held for control, financial, operating, or trade advantages—securities which cannot be disposed of without detriment to the holding company—are classified as fixed assets. Securities which may be disposed of at will and converted with readiness into cash are permitted by accountants usually to be included in the current asset group. Consequently, no objection apparently may be raised to the inclusion of marketable securities in the grouping for current position if the securities are as represented. One even might overlook a small amount of treasury stock in certain circumstances if the amount involved were negligible as compared with the total of marketable securities. But when a corporation includes in such caption a young railroad, the book value of which is equal to half the amount represented to be marketable securities, it seems that one reasonably might demur at such inclusion. The justification advanced in the case referred to was that the railroad was not necessary to the operations of the industrial concern; that it could be sold at any time; and that as a matter of fact the owning corporation then was entertaining an offer of purchase. Imagination in business is well recognized as a valuable asset. It is wonderful to behold sometimes the point to which imagination may be stretched in order to gain a favorable current or other position.

Odd Relationships

Consolidation of financial statements sometimes brings out odd

relationships which have a bearing on significance. What may appear to be a favorable condition of one corporation, when judged on its own statement, often suffers when brought into consolidation with the condition of other companies to which it is related. One company which in itself is fairly prosperous may be having its life blood sucked away by some unwisely conceived or badly operated susidiary or other poor relation. Business men who are thoroughly familiar with one line sometimes become interested in fads and fancies in other fields, and risk their success by dabbling in industries where they are not qualified to operate. For this or whatver other reason there may have been, a certain prosperous concern went into a related line and organized a subsidiary company in which it acquired all the capital stock. The venture had a hard struggle and was a constant drain on the parent company. As a means of meeting current financial needs, the subsidiary issued trade acceptances to the parent company, charging the inter-company account thereof. The parent company, which had good financial contracts with several banks, discounted the acceptances. The proceeds were advanced to the subsidiary and credited by the latter to the inter-company account. Thus, the subsidiary had received cash and issued acceptances payable. On the face of the parent company's balance sheet appeared no trace of the transaction which involved a large sum, further than a footnote which mentioned a contingent liability for trade acceptances discounted. Only when the balance sheets were consolidated was the true significance of the trade acceptance situation revealed. What might have appeared on the parent company's balance sheet to be a contingent liability on account of general trade relations was as a practical matter a direct liability to the banks.

Unsafe Consideration

Independent consideration of one unit in a group of enterprises is unsafe without consideration of related companies. Kiting of one kind or another often is concealed through inter-company accounts. Receivables of one company which may go to make up a favorable current position are payables of another company in the group. Securities, likewise, may contribute to a satisfactory financial condition, when in fact some of the securities may be those of underlying companies with deficits. In a case which is the subject of current gossip, one company, with a substantial deficit, is said to have reorganized its corporate structure and leased its plant and operating facilities to the former parent company, under a contract calling for large annual rentals, in order that the parent company might be relieved of an unfavorable showing which would result from consolidation. The Federal Reserve Board, something over a year ago, promulgated a regulation which requires that whenever the borrower is closely affiliated, or controls subsidiary corporations or firms, the borrower's statements shall be accompanied by separate financial statements of such affiliated or subsidiary corporations or firms. This is only a part of the regulation, but the remainder thereof does not apply to the point in question. The point is that interpretation of a balance sheet representing one of the parties in a group is hazardous and likely to prove unsatisfactory unless the statements of the other parties are subjected to consideration at the same time.

Limitations of Comparisons

Comparisons, while affording another means of interpretation, have their limitations. Usually, they suggest further investigation in order to ascertain the facts rather than establishing significances which are conclusive immediately. The increase in cost during one period over that of a preceding period requires liberal investigation before one may reach a final conclusion as to the cause. Manufacturing costs, involving as they do three distinct factors which are subject to many variations, illustrate one of the serious complications involved in attempted interpretation. The item of materials alone offers plenty of opportunity for consideration. Increased cost of materials may be accounted for by an increase in the purchase price, by a change in the basis of relieving stores or the method of pricing materials charged to the cost of consumption, by an increase in the waste factor, or by adjustments incident to inventory valuation, etc. The same application might be followed through with respect to labor and overhead. Consequently, any possibility of arriving at final conclusions as a result of comparisons appears to be somewhat hopeless, unless the investigation is pursued far enough to establish the facts which are back of the figures. Comparisons, however, do show trends and indicate tendencies which may have a very important bearing on the question of administration in which credit grantors are interested.

Attention to Ratios

Perhaps it is because of the obvious difficulty, in the light of our present state of knowledge, of attempting to utilize comparisons for the purpose of drawing final conclusions that so much attention has been given to the subject of ratios. Ratios are means of indicating relationships, and relationships frequently are vauable in the work of interpretation. Ratios, however, like other means of interpretation, should be used with discretion. Some of the ratios advocated are sound and dependable. Others are unsound and misleading. The ratios which show the various gradations of profit in relation to sales are dependable and helpful. There is between sales and account receivable a relationship full of significance for credit men. There is also between finished goods inventories and sales a relationship which is of interest to both manufacturing and selling departments. It still remains, after several years' use of a ratio involving the two factors, for some one to demonstrate a relationship between accounts receivable and inventories. There is, however, an opportunity for someone to develop the relationship existing between finished goods and sales in the utilization of working capital, taking into consideration the turnover thereof. One ratio frequently misused is that which results from the division of owner capital by borrowed capital, instead of setting up two ratios, one to show the relationship between borrowed capital and total capital, the other relationship between owned capital and total capital. But withal ratios have served a very useful purpose in stimulating thought along the lines of interpretation.

Reference to Financial Statements

Consideration of the subject of interpretation would not be quite complete, it seems, without some reference to financial statements which appear in the reports of certified public accountants, and perhaps to the reports themselves.

A certified general audit report with an unqualified certificate is a representation that the accounts as stated are correct, having been verified by an independent and unbiased reviewer. While the representatives may be accepted as a basis for reliance, they may not be regarded as having been guaranteed by the accountant. An accountant is required to be qualified by education and experience for the work which he undertakes, to exercise his best skill and use reasonable care and diligence in the execution of his work. Being human, he is fallible and may not be held for errors of judgment if he can show application of reasonable skill and judgment.

Accountancy practice, being in a formative stage in this country, has made relatively little progress in the matter of standardization. Little has been done to acquaint the general public with the scope and classification of accountancy service. While some individuals who are familiar with the subject realize that a certified public accountant's work is varied, few persons understand that there are many different types of service and that these types must be differentiated. Some of the work which a certified public accountant does may be classified as follows: General audits, balance sheet audits, cash audits, partial audits, general examinations, limited examinations and investigations. An accountant also prepares and reviews tax returns, contests assessments and prosecutes tax claims, prepares and renders opinions on tax matters, conducts surveys and devises and installs systems in relation to the general accounts, to the work of cost finding and to budgeting. Miscellaneous service embraces preparing and rendering opinions

having to do with accounting, financial and business matters, giving testimony in court, acting as arbitrator in accounting controversies, rendering advice in accounting matters, preparing statements from books or records without verification, and so on though a long list.

A Variety of Reports

The variety of services gives rise to a variety of reports. While it is incumbent upon an accountant to set forth clearly in his reports the scope and character of such work, and his conclusions after its completion, it is equally incumbent upon those who use his reports that they read the reports and give consideration to the accountant's representations. Instances are known where financial statements in accountants' reports have been used without the reader having read the accompanying comments which altered entirely the significance of the statement. It seems fair to point out to those who have occasion to consider reports of certified public accountants that some contain certificates while others do not; that some certificates are unqualified while others are qualified for the purpose of excepting certain items which the accountant has not been permitted or able to verify to his satisfaction.

Reports on general audits, balance sheet audits and general examinations usually should be accompanied by certificates, but the certificates must be read and considered before the report may be accepted as a basis for reliance. The report on a limited examination usually will not contain a certificate, or if it does the certificate will be so highly qualified as to nullify any value which the report may have.

Limited examinations as a type are the bane of an accountant's existence. Taking the position that he may not refuse to serve anyone who seeks his services legitimately, the accountant sometimes undertakes to make a limited examination in which the work is confined to a verification of certain items or only a partial verification of some of these items. The restrictions are placed upon the accountant by the client, the client's motive usually being to keep down the expense. Cases have been known where reports on limited examinations have been issued for home consumption, as it were, only to be used later in seeking bank or commercial credit, or in supporting credits already established.

Cooperation of Credit Men

Certified public accountants need the co-operation of credit men in eliminating engagements which call for service of this type. An experience or two of having such reports rejected as being of no value for credit purposes will help to educate clients to the necessity of procuring for credit purposes general audit reports with unqualified certificates under engagements in which the accountant is permitted to satisfy himself reasonably as to the accuracy of the financial results as well as transactions leading to such results.

Finally, it seems that we are forced to the conclusion that the art of interpretation is in its infancy. Relatively little is known concerning it. The subject is full of possibilities. As it is further developed it will prove increasingly useful in the matter of credit, investment, management and administration and to the various other purposes which financial statements serve.

New Manager Whiting Paper Co.

Following the passing of the late George D. Lapham, manager of the Philadelphia Branch of the Whiting Paper Company for the past ten years, there has been appointed to fill the vacancy made by his death D. F. Coots, who has been assigned Quaker City manager of the company. Mr. Coots comes to the Philadelphia branch at 619 Chestnut street from the New York offices with which he has been associated for the past three years, since his release from the Army where he served during the Great War. Manager Coots has been connected with the Whiting Paper Company for more than twelve years in the Boston offices and New York headquarters although making his home in Springfield, Mass. He is well known throughout the trade, having covered the territory in these districts for the sales organization.

Great Southern Lumber Co. Gives Land

[FROM OUR REGULAR CORRESPONDENT]

BOGALUSA, La., March 22, 1926.—Announcement of the gift of one thousand acres of land near Bogalusa to the Louisiana State University by the Great Southern Lumber Company was made at the offices of the Company here this week. The peculiar value of this gift to the University is that it will make it possible for its educational work in forestry to be carried on in a practical as well as a technical manner. Although the South presents the best conditions for the practice of reforestation of any section of this country or of the civilized world, there has not been heretofore any educational institution where instruction in the technical side of the subject could be combined with a practical application of the principles of forestry on the lands and in the plants of an industrial corporation.

The location of this particular tract near Bogalusa and adjacent to the lumbering operations of the Great Southern Lumber Company which involves also the cutting of pulpwood, the turpentining of trees, and the conservation of materials now in the woods and at the plants, offers a particularly interesting opportunity for the development of a forestry school along somewhat new lines.

The land is sufficient in amount to enable the university to carry on any kind of experiment in forestry work which may be practicable in this section. It is located between Bogalus and Franklinton, facing on one of the best highways in the State. Upon it will be quite possible not only so carry on experiment work but to establish a tract of timber that will in a few years have a considerable value.

For several years the forest school has been conducted near Bogalusa under the direction of Professor J. G. Lee of the Louisiana State University, and great progress has been made in the building up of its course. With the additional facilities now offered it will be possible to turn out graduates who will be far better fitted for employment by industrial corporations.

The importance of reforestation to such corporations is being recognized all over the South today. With this new condition, it is most desirable that there shall be available young men trained in the best methods of forest management, and unquestionably men so trained will find ready employment and use perhaps for their services.

Wisconsin Traffic Association Meets

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, March 23, 1926.—The Wisconsin Traffic Association, an organization of pulp and paper mills in Wisconsin and upper Michigan, held their annual meeting in Chicago on Tuesday, March 16 at which time the following officers were elected: C. S. Boyd, president, Appleton Coated Paper Company; Guy Waldo, secretary-treasurer.

The following Executive Committee was also elected:

C. S. Boyd, president, Appleton Coated Paper Company. Guy Waldo, manager, Flambeau Paper Company; L. E. Nash, vice president, Nekoosa-Edwards Paper Company; W. H. Ryan, Kimberly Clark Company; Wm. Eibel, manager, Rhinelander Paper Company; Geo. P. Berkey, vice president and manager, Consolidated Water Power & Paper Company; D. K. Brown, general manager, Neenah Paper Company.

The meeting this year was the eighteenth annual meeting and was very well attended by representatives of the membership.

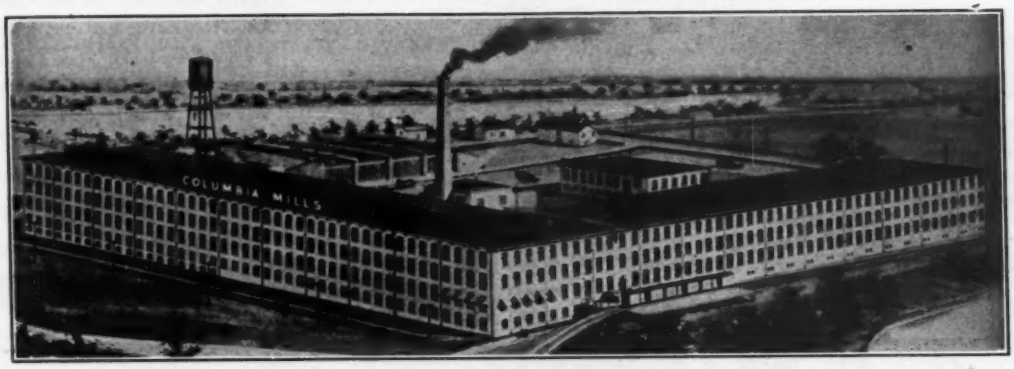
For a number of years past the association has been known as the Wisconsin Traffic Association and it was voted to change the name to the Wisconsin Paper and Pulp Manufacturers' Traffic Association. The object in making the change was to have a name that would signify the industry represented and also to permit a differentiation as between the bona fide representatives of an industry and the so-called freight checking bureaus which usually adopt the name "association" in connection with their activities.

COTTON DRYER FELTS

"Mt. Vernon" Standard Weave
Medium—Standard—Extra Heavy
Widths 36" to 164"

"Richland" Triplex Weave
Widths 68" to 210"

Felts within above ranges made in lengths as required



Columbia, S. C., Plant of Mt. Vernon—Woodberry Mills, Inc., Baltimore—where "Richland" Felts are made.

Orders must be placed sufficiently in advance to insure satisfactory delivery

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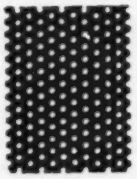

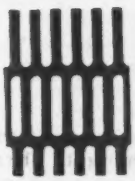

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NEW YORK IMPORTS

WEEK ENDING MARCH 27, 1926

SUMMARY

Cigarette paper .....31 cs.
Wall paper .....4 bls., 2 cs.
Paper hangings .....17 bls., 14 cs.
Paper hanging pattern books .....32 cs.
Decalcomania paper .....10 cs.
Printing paper .....231 cs.
Printed paper .....28 cs.
Surface coated paper .....70 cs.
Straw paper .....106 rolls
Straw board .....1,262 rolls
Colored paper .....10 cs.
Pergamyn paper .....34 cs.
Crepe paper .....11 cs.
Packing paper .....128 rolls, 4 cs.
Kraft paper .....158 rolls
Drawing paper .....22 cs.
Writing paper .....15 cs.
Waxed paper .....3 cs.
Tracing paper .....19 cs.
Miscellaneous paper .....203 rolls, 493 cs.

CIGARETTE PAPER

British American Tobacco Co., Cedric, Liverpool, 5 cs.
The Sutbrug Co., DeGrasse, Havre, 26 cs.

WALL PAPER

A. C. Dodman, Jr., Inc., Olympic, Southampton, 2 cs.
F. J. Emmerich, Albert Ballin, Hamburg, 2 bls.
F. J. Emmerich, Caronia, Liverpool, 2 bls.

PAPER HANGINGS

W. H. S. Lloyd & Co., Minnetonka, London, 14 bls., 8 cs.
A. C. Dodman, Jr., Inc., Caronia, Liverpool, 3 bls., 6 cs.

PAPER HANGING PATTERN BOOKS

W. H. S. Lloyd & Co., Minnetonka, London, 32 cs.

DECALCOMANIA PAPER

C. W. Sellers, Albert Ballin, Hamburg, 5 cs.
Phoenix Shipping Co., Albert Ballin, Hamburg, 2 cs.
International Forwarding Co., Blommersdyk, Rotterdam, 3 cs.

PRINTING PAPER

Perkins, Goodwin & Co., Albert Ballin, Hamburg, 151 cs.
Steiner Paper Corp., Tomalva, Rotterdam, 27 cs.
B. F. Drakenfeld & Co., Cedric, Liverpool, 33 cs.
Globe Shipping Co., Blommersdyk, Rotterdam, 3 cs.
E. Dietzgen Co., Blommersdyk, Rotterdam, 17 cs.

PRINTED PAPER

Titan Shipping Co., Olympic, Southampton, 28 cs.

SURFACE COATED PAPER

Phoenix Shipping Co., Albert Ballin, Hamburg, 70 cs.

STRAW PAPER

State Bank, Blommersdyk, Rotterdam, 106 rolls.

STRAW BOARD

A. Vuyk, Blommersdyk, Rotterdam, 850 rolls.
Thompson, Norris & Co., Blommersdyk, Rotterdam, 412 rolls.

COLORED PAPER

P. H. Petry & Co., Albert Ballin, Hamburg, 10 cs.

PERGAMYN PAPER

F. C. Strype, Albert Ballin, Hamburg, 34 cs.

CREPE PAPER

Consumers Paper Co., Alvarado, Quayaquil, 11 cs.

PACKING PAPER

Okonite Callender & Cable Co., Inc., Amer. Banker, London, 108 rolls.
Wilkinson Bros. & Co., Inc., Blommersdyk, Rotterdam, 20 rolls.
Steffens, Jones & Co., Blommersdyk, Rotterdam, 4 cs.

KRAFT PAPER

Arkell Safty Bag Co., Drottningholm, Gothenburg, 158 rolls.

DRAWING PAPER

Favor, Ruhl & Co., Indiana, Havre, 14 cs.
H. Reeve Angel & Co., Inc., Minnetonka, London, 2 cs.
Devoe, Raynolds Co., Inc., Minnetonka, London, 3 cs.
International Forwarding Co., Minnetonka, London, 3 cs.

WRITING PAPER

Guibout reres, Olympic, Southampton, 15 cs.

WAXED PAPER

Draeger ShippindCo., Minnetouka, London, 3 cs.

TRACING PAPER

Phoenix Shipping Co., Blommersdyk, Rotterdam, 19 cs.

MISCELLANEOUS PAPER

Tamm & Co., Blommersdyk, Rotterdam, 7 cs.
International Forwarding Co., Blommersdyk, Rotterdam, 23 cs.
Phoenix Shipping Co., Albert Ballin, Hamburg, 3 cs.
Chemical National Bank, Albert Ballin, Hamburg, 117 rolls, 18 cs.
Perry, Ryer & Co., Caledonia, Glasgow, 168 cs.
F. Weber & Co., Columbia, Trieste, 7 cs.
R. Wilson Paper Corp., Incemore, Leith, 46 ro'ls.
F. L. Kraemer & Co., Minnetonka, London, 2 cs.
T. Barrett & Son, Drottningholm, Gothenburg, 40 rolls.
E. H. Sergeant & Co., Drottningholm, Gothenburg, 6 cs.
Coenca, Morrison & Co., DeGrasse, Havre, 8 cs.
Japan Paper Co., DeGrasse, Havre, 10 cs.
F. Blank, DeGrasse, Havre, 4 cs.
H. de Maguinn, DeGrasse, Havre, 12 cs.
Standard Products Corp., DeGrasse, Havre, 108 cs.

RAGS, BAGGINGS, ETC.

L. H. Abenheimer, A. Ballin, Hamburg, 69 bls. rags.
Leviton-Glaser Woolstock Co., A. Ballin, Hamburg, 22 bls. rags.
E. J. Keller Co., Inc., A. Ballin, Hamburg, 286 bls. rags.
E. J. Keller Co., Inc., A. Ballin, Hamburg, 129 b's. bagging.
R. Blank, A. Ballin, Hamburg, 30 bls. rags.
Castle & Overton, Inc., A. Ballin, Hamburg, 33 bls. rags.
Mechanics & Metals National Bank, A. Ballin, Hamburg, 57 bls. rags.
The Barrett Co., A. Ballin, Hamburg, 48 bls. rags.
Salomon Bros. & Co., A. Ballin, Hamburg, 112 bls. rags.
Salomon Bros. & Co., A. Bal'in, Hamburg, 121 bls. bagging.
J. A. Lalor & Co., A. Ballin, Hamburg, 19 bls. rags.
Anglo-Sou'h American Trust Co., A. Ballin, Hamburg, 30 bls. rags.
National Bank of Commerce, A. Ballin, Hamburg, 410 bls. rags.
Central National Bank & Trust Co., Ca'edonia, Glasgow, 45 bls. bagging.
Equitable Trust Co., Indiana, Dunkirk, 809 bls. rags.
Castle & Overton, Inc., Indiana, Dunkirk, 20 bls. rags.
Castle & Overton, Inc., Indiana, Dunkirk, 125 bls. bagging.
The Stone Bros. Co., Inc., Indiana, Havre, 25 bls. rags.
The Stone Bros. Co., Inc., Indiana, Havre, 33 bls. new cuttings.
Castle & Overton, Inc., Indiana, Havre, 54 bls. new cuttings.
Mechanics & Metals National Bank, Indiana, Havre, 80 bls. rags.
Equitable Trust Co., Indiana, Havre, 310 bls. rags.
E. J. Keller Co., Inc., Indiana, Havre, 410 bls. rags.
E. J. Keller Co., Inc., Indiana, Havre, 25 bls. bagging.
Goldman, Sachs & Co., Indiana, Havre, 44 bls. rags.
Katzenstein & Kane, Inc., Indiana, Havre, 30 bls. rags.
Brown Bros. & Co., Indiana, Havre, 71 bls. rags.
Salomon Bros. & Co., Carlier, Antwerp, 84 bls. rags.
Salomon Bros. & Co., Carlier, Antwerp, 45 bls. jute waste.
E. J. Keller Co., Inc., Carlier, Antwerp, 183 bls. rags.
Baring Bros. & Co., Lycia, Bristol, 434 bls. rags.
State Bank, United States, Copenhagen, 800 bls. bagging.
Marx Maier Papermill Supply Co., Tomalva, Rotterdam, 137 bls. bagging.
Anglo-South American Trust Co., Minnetonka, London, 19 bls. rags.
E. J. Keller Co., Inc., Kentuckian, Kobe, 66 bls. rags.
E. J. Keller Co., Inc., Arabic, Hamburg, 37 bls. bagging.
Robert Blank, Arabic, Hamburg, 106 bls. rags.
L. H. Abenheimer, Arabic, Hamburg, 86 bls. rags.
Grace National Bank, Arabic, Hamburg, 18 bls. rags.
Fidelity International Trust Co., Arabic, Hamburg, 30 bls. bagging.
Mechanics & Metals National Bank, Arabic, Hamburg, 108 bls. rags.
East River National Bank, Arabic, Hamburg, 32 bls. rags.
G. W. Millar & Co., Inc., Arabic, Hamburg, 144 bls. rags.
A. W. Fenton, Inc., Anacortes, Cardiff, 261 bls. rags.
C. R. Spence, Anacortes, Cardiff, 53 bls. rags.
Mechanics & Metals National Bank, Corson, Leghorn, 181 b's. rags.
Brown Bros. & Co., Corson, Naples, 106 bls. rags.
Philadelphia National Bank, Columbia, Venice, 36 bls. rags.
Mechanics & Metals National Bank, Columbia, Venice, 121 bls. rags.
Italian Bank, Columbia, Venice, 42 bls. rags.
Guaranty Trust Co., Columbia, Venice, 68 bls. rags.
Mechanics & Metals National Bank, Co'umbia, Trieste, 209 bls. rags.
M. Snedeker Corp., Incemore, Leith, 138 bls. rags.
Central National Bank, Cedric, Liverpool, 52 bls. rags.
B. D. Kaplan, Cedric, Liverpool, 47 bls. rags.
East River National Bank, Carenco, Leghorn, 150 bls. rags.
Robert Blank, Carenco, Naples, 90 bls. rags.
Mechanics & Metals National Bank, City of St. Joseph, Leghorn, 100 bls. rags.
A. W. Fenton, Inc., City of St. Joseph, Leghorn, 91 bls. rags.
E. J. Keller Co., Inc., City of St. Joseph, Genoa, 76 bls. rags.
Salomon Bros. & Co., West Eldara, Antwerp, 19 bls. rags.
B. D. Kaplan, West Eldara, Rotterdam, 38 bls. rags.
National Bank of Commerce, West Eldara, Rotterdam, 153 bls. bagging.
National Bank of Commerce, West Eldara, Rotterdam, 291 bls. rags.
American Woolstock Corp., West Eldara, Rotterdam, 37 bls. rags.
E. J. Keller Co., Inc., Sangus, Alexandria, 54 bls. rags.
Marx Maier Papermill Supply Co., Bloomerdyk, Rotterdam, 40 bls. rags.
Marx Maier Papermill Supply Co., Blommersdyk, Rotterdam, 2 bls. bagging.
The Stone Bros. Co., Inc., Blommersdyk, Rotterdam, 43 bls. rags.
E. J. Keller Co., Inc., Blommersdyk, Rotterdam, 30 bls. rags.
G. M. Graves Co., Inc., Blommersdyk, Rotterdam, 3 bls. rags.
G. M. Graves Co., Inc., Blommersdyk, Rotterdam, 16 bls. bagging.
R. F. Downing & Co., Blommersdyk, Rotterdam, 65 bls. bagging.
D. M. Hicks, Inc., Blommersdyk, Rotterdam, 46 bls. rags.
American Woolstock Corp., Blommersdyk, Rotterdam, 168 bls. rags.

OLD ROPE

Brown Bros. & Co., A. Ballin, Hamburg, 57 coils.
Brown Bros. & Co., Lycia, Bristol, 215 coils.
Brown Bros & Co., United States, Copenhagen, 110 coils.
E. J. Keller Co., Inc., Indiana, Havre, 24 bls.
E. J. Keller Co., Inc., Carlier, Antwerp, 81 coils.
Irving Bank-Columbia Trust Co., Carlier, Antwerp, 82 coils.

MANILA ROPE

Ellermans' Wilson Line, Minnetonka, London, 98 coils.
Brown Bros. & Co., Blommersdyk, Rotterdam, 24 coils.
Brown Bros. & Co., Blommersdyk, Rotterdam, 47 pgs.

CASEIN

Casein Manufacturing Co., Castillian Prince, Buenos Aires, 1,250 bags, 165,301 lbs.
National City Bank, Castillian Prince, Buenos Aires, 834 bags, 50,045 kilos.

CHINA CLAY

O. T. Wilson & Co., Lycia, Bristol, 30 casks.

WOOD PULP

Buck, Kiaer & Co., Inc., United States, Oslo, 1,200 bls. kra. pulp.

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Orr Endless Felts can now be obtained up to 86 feet in length.

With our enlarged new equipment we can now furnish Paper Manufacturers with endless felts up to 86 feet in length.

Paper Manufacturers who carefully check manufacturing costs, and also strive to produce more and better paper at a lower cost per ton, prefer the unvarying quality and long service of ORR felts. A trial of them will bring about a preference that will be lasting.

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Pulp and Paper Mill Machinery

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—Bronze and Lead Valves—

DRYER FELTS
STANDARD and
MULTIPLE PLY

ENGLISH WEAVE

In Two, Three, Four, Five and Six Ply, 60 inches to 176 inches in width.

BY ACTUAL TEST this felt will dry 33 per cent more paper, with ABSOLUTELY NO FELT MARKS IN THE PAPER.

TRIUNE
THREE PLY FELT for other paper

FITCHBURG DUCK MILLS
FITCHBURG · MASSACHUSETTS

Ticonderoga Machine Works
TICONDEROGA, N. Y., U. S. A.
MANUFACTURERS OF
WARREN IMPROVED CALENDAR DOCTORS
With Flexible Blades, Universal Adjustment and Control
(PATENTED)
WARREN IMPROVED DOUBLE PATENT DRUM WINDERS
Patent BALL VALVE Hydrant
Stock Circulating Systems and other Paper Mill Specialties
SEND FOR OUR BULLETIN

Imports of Paper and Paper Stock

(*Continued from page 74*)

Buck, Kiaer & Co., Inc., United States, Oslo, 90 bls. sulphite pulp.
Irving Bank-Columbia Trust Co., United States, Copenhagen, 339 bls. sulphite pulp.
Perkins, Goodwin & Co., Stavangerfjord, Drammen, 250 bls. sulphite pulp.
Chemical National Bank, Stavangerfjord, Oslo, 900 bls. sulphite pulp.
Buck, Kiaer & Co., Inc., Stavangerfjord, Hommelvik, 3,000 bls. sulphite pulp.
J. Andersen & Co., Drottningholm, Gothenburg, 250 bls. sulphite pulp.
Johanson, Wales & Sparre, Inc., Drottningholm, Gothenburg, 280 bls. sulphite pulp.
Johanson, Wales & Sparre, Inc., Drottningholm, Gothenburg, 299 bls. dry soda pulp.
E. M. Sergeant & Co., Drottningholm, Gothenburg, 449 bls. dry soda pulp.
E. M. Sergeant & Co., Drottningholm, Gothenburg, 432 bls. sulphite pulp.
Bulkley, Dunton & Co., Blommersdyk, Rotterdam, 1,150 bls. wood pulp.
M. Gottesman & Co., Inc., Blommersdyk, Rotterdam, 650 bls. wood pulp.

WOOD FLOUR

The Hausa Co., West Eldara, Rotterdam, 400 bags, 20,300 kilos.
B. L. Soberski, West Eldara, Rotterdam, 3,000 bags, 150,000 kilos.
B. L. Soberski, Stavangerfjord, Frederikstad, 1,425 bags.

BOSTON IMPORTS

WEEK ENDING MARCH 27, 1926

Steffens, Jones & Co., West Eldara, Rotterdam, 22 bls. packing paper.
E. J. Keller Co., Inc., West Eldara, Rotterdam, 182 bls. rags.
E. J. Keller Co., Inc., West Celina, Hamburg, 540 bls. rags.
E. J. Keller Co., Inc., West Celina, Hamburg, 72 bls. bagging.
E. J. Keller Co., Inc., West Celina, Bremen, 42 bls. bagging.
E. J. Keller Co., Inc., West Celina, Bremen, 55 coils old rope.
E. J. Keller Co., Inc., Deuel, Hamburg, 109 bls. rags.
E. J. Keller Co., Inc., Deuel, Hamburg, 58 bls. bagging.
Castle & Overton, Inc., Nessian, Antwerp, 3,198 bls. wood pulp.
Castle & Overton, Inc., Sac City, Rotterdam, 779 bls. wood pulp.

PHILADELPHIA IMPORTS

WEEK ENDING MARCH 27, 1926

D. I. Murphy, Angela, Gijon, 178 bls. old rope.
Philadelphia National Bank, Indiana, Dunkirk, 594 bls. rags.
Kidder-Peabody Accep. Corp., Indiana, Dunkirk, 21 bls. rags.
Mechanics & Metals National Bank, Indiana, Havre, 45 bls. rags.
The Stone Bros. Co., Inc., Indiana, Havre, 19 bls. rags.
Kidder-Peabody Accep. Corp., Indiana, Havre, 28 bls. rags.
E. H. Bailey & Co., Indiana, Havre, 1 cs. drawing paper.
State Bank, Indiana, Havre, 106 bls. rags.
W. Schall & Co., Indiana, Havre, 142 bls. rags.
D. I. Murphy, Indiana, Havre, 86 bls. rags.
Railway Supply & Mfrs. Co., Corson, Genoa, 39 bls. cotton waste.
O'Neill Bros., Corson, Genoa, 53 bls. cotton waste.
E. J. Keller Co., Inc., Corson, Genoa, 78 bls. cotton waste.
L. H. Abenheimer, Corson, Naples, 348 bls. rags.
Brown Bros. & Co., Corson, Palermo, 112 bls. rags.
A. W. Fenton, Inc., Incemore, Leith, 66 bls. rags.
G. W. Millar & Co., Inc., Incemore, Leith, 70 coils old rope.
E. H. Bailey & Co., Incemore, Dundee, 60 cs. paper.
A. W. Fenton, Inc., Incemore, Belfast, 193 bls. rags.
D. I. Murphy, City of St. Joseph, Leghorn, 73 bls. rags.
Union National Bank, Nobles, Algiers, 346 bls. rags.
Mechanics & Metals National Bank, Nobles, Algiers, 102 coils old rope.
Castle & Overton, Inc., Nessian, Antwerp, 1,068 bls. wood pulp.
Castle & Overton, Inc., Nitonian, Rotterdam, 36 bls. rags.
Castle & Overton, Inc., West Campgaw, Hamburg, 80 bls. rags.
Castle & Overton, Inc., West Arrow, Antwerp, 418 bls. rags.
Castle & Overton, Inc., West Arrow, Rotterdam, 121 bls. rags.
Castle & Overton, Inc., Legie, Hamburg, 252 bls. rags.
E. J. Keller Co., Inc., Grete, Hamburg, 45 bls. rags.
E. J. Keller Co., Inc. Hellen, Barcelona, 231 bls. rags.
E. J. Keller Co., Inc., E. Luckenbach, Kobe, 420 bls. rags.
E. J. Keller Co., Inc., Nitonian, Amsterdam, 112 bls. rags.
E. J. Keller Co., Inc., Nitonian, Rotterdam, 147 bls. rags.
E. J. Keller Co., Inc., Storm King, Algiers, 228 bls. rags.
E. J. Keller Co., Inc., Crefeld, Bremen, 148 bls. rags.
E. J. Keller Co., Inc., West Arrow, Rotterdam, 50 bls. rags.
Robert Blank, Crefeld, Bremen, 88 bls. rags.
Robert Blank, Crefeld, Hamburg, 221 bls. rags.
Robert Blank, West Arrow, Antwerp, 202 bls. rags.
Robert Blank, West Arrow, Rotterdam, 311 bls. rags.
Robert Blank, Manchester Hero, Manchester, 30 bls. rags.

BALTIMORE IMPORTS

WEEK ENDING MARCH 27, 1926

Baltimore Trust Co., Indiana, Dunkirk, 60 bls. rags.
N. Frank & Son, Indiana, Havre, 5 bls. rags.
Baltimore Trust Co., Indiana, Havre, 137 bls. rags.
E. J. Keller Co., Inc., Eastern Victor, Rotterdam, 721 bls. rags.
Castle & Overton, Inc., Maryland, Antwerp, 554 bls. wood pulp.
Castle & Overton, Inc., Sac City, Rotterdam, 2,813 bls. wood pulp.

NEW ORLEANS IMPORTS

WEEK ENDING MARCH 27, 1926

Castle & Overton, Inc., Youngstown, Germany, 254 bls. rags.
Castle & Overton, Inc., Aquarius, Germany, 312 bls. rags.

Bryant Paper Co. Lets Contract for Machine Room

KALAMAZOO, Mich., March 23, 1926.—The contract for the erection of the new machine room for the Bryant division of the Bryant Paper Company was awarded Thursday to the R. D. Boyer Company of this city by V. D. Simons, Chicago, consulting engineer in charge of construction.

This structure will be 278 by 87 feet in dimensions with an extreme height of 35 feet from the first floor to the ceiling. There will also be a 16 foot basement under the whole unit. As previously stated in these columns the building is to occupy a court between mills 2 and 3 of the Bryant division. This area has been entirely cleared of three old brick buildings and the R. D. Boyer Company is now engaged in the excavating for the new addition.

The specifications embody many interesting features. The building will be re-inforced concrete throughout. The load, in addition to the foundation, will be carried on 90 piers, each six by seven feet in dimensions and with a depth of two feet, three inches. There will be 90 supporting piers in the basement to carry the first floor. Above that line will be a frame of 38 columns, 19 on each side of the building and extending to the roof. These will be each 24 by 48 inches in size, while in addition there will be a concrete girder rail, 30 by 36 inches and capable of carrying the traveling crane.

It will be 24 feet in the clear from the first floor to the underside of the steel girders or tissues, which will span the width of the building without supporting columns. The traveling crane will be just below these girders.

R. D. Boyer announces that when the work of pouring concrete begins it will be a 24 hour task daily until completed. That will eliminate joints that always form when the work is interrupted. All sand and gravel will be washed and screened before use, thus eliminating foreign soils. Concrete will be delivered direct to the forms through an overhead concreting system, which will be 150 feet high and operated by machinery, both in delivery of concrete and to dumping gravel into the concrete mixer.

The building program as laid out by Mr. Simons calls for the manufacture of paper in the new unit some time in October.

Bids for Government Paper

WASHINGTON, D. C., March 31, 1926.—The Government Printing Office has received the following bids for 185,000 pounds 50 per cent rag machine-finish book paper, 48 inch rolls: Bryant Paper Company, 10.45 cents per pound; Allied Paper Mills, 12.49 cents; American Writing Paper Company, 9.25 cents; Barton, Duer & Koch Paper Company, 9.68 cents; Lindemeyr & Harker, 11.65 cents; and Whitaker Paper Company, 10.11 cents.

The Printing Office also received bids for 25,000 white writing envelopes, 4-4¼ x 2½: R. Carter Ballatyne, $1.05 per thousand; R. P. Andrews Paper Company, $0.93; Mathers-Lamm Paper Company, $0.76; Charles W. Beers & Co., $1.30; U. S. Envelope Company, $0.71; Union Envelope Company, $0.63.

The Government Printing Office has received the following bids for 40,000 pounds Binders' Board No. 2, 25 x 30—No. 25: R. P. Andrews Paper Company, $74.50 per thousand; Mathers-Lamm Paper $73.00; Dobler & Mudge, $73.75; Lindemeyr & Harker, $78.00; Whitaker Paper Company, $76.80; and LaBoiteaux Company, $72.00.

The KALBFLEISCH CHEMICALS & SERVICE for PAPER

Satisfaction in Sizing

THE effect of sizing upon the quality of paper is far reaching. In fact it is a "key" process.

The recognized importance of sizing necessitates the use of a dependable size —such as Kalbfleisch Rosin Size has proved itself to be.

Equally valuable is Kalbfleisch service. The long experience of their Engineers with sizing processes has given them a fund of knowledge that is willingly placed at your disposal. They will cooperate in every way to secure the best results from the De Cew patented sizing process in conjunction with Kalbfleisch Chemicals.

They welcome the opportunity to confer with you on points of Quality, Economy and Service.

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Kalamazoo, Michigan
Elizabeth, New Jersey
Chattanooga, Tennessee
Waterbury, Connecticut

New York Market Review

Office of THE PAPER TRADE JOURNAL,
Wednesday, March 31, 1926.

Conditions in the local paper market continue to improve, and the demand for the various grades of paper is quite active. According to leading observers of the industry, prices are being well maintained, and there seems to have been little, or no, shading to speak of, for some time. Reports from the sales organizations of the leading paper houses denote that the spring campaign is proving even more successful than anticipated, and a decided feeling of optimism prevails.

News print continues in steady demand, and the consumption seems to be increasing fast enough to absorb the greater production being maintained this year. The tone of the spot market remains strong, and prices generally are holding up very well. The new contract prices that came into effect at the beginning of the year have proved a decided inducement to publishers to stock well ahead.

The various grades of paper board are in good request, and the volume of inquiries being received for future business is very encouraging. The demand for fine paper is expanding, while tissues are in particularly good request, at firm prices. The coarse paper market is enjoying a satisfactory spring season and the demand for wrapping paper is unusually strong.

Mechanical Pulp

Trading in the ground wood market during the past week continued along routine lines, and the prices on both imported and domestic mechanical pulp were practically unchanged. Offerings in the spot market are rather scarce, but there is a prospect of increased production now that the weather is becoming more favorable, when stocks should become more plentiful. Imported ground wood is still selling at from $40 to $45 a ton, ship side, while domestic and Canadian ground wood is quoted at from $30 to $33 a ton, at pulp mill.

Chemical Pulp

The chemical pulp market continues to exhibit a strong tendency, and prices are being well maintained. The Scandinavian mills are well sold ahead, and competition for the balance of the 1927 output is gradually becoming keener. The domestic chemical pulp producers have also a good volume of orders on their books for future delivery. Imported bleached sulphite is now quoted at 4.10 @ 4.50. Foreign kraft is going strong at from 3.25 to 3.50, ship side, Atlantic ports, while domestic kraft is quoted at from 3.00 to 3.50, at pulp mill.

Old Rope and Bagging

Domestic old rope is in fairly good request, and prices are holding up well to former levels. The demand for imported old rope continues rather quiet. The bagging market is exhibiting an easier tone, and trading has been rather limited of late. Burlap is inclined to fluctuate, and the market is rather unsettled.

Rags

While the buying market for rags is still below normal, prices are being well maintained, and there is little prospect of concessions being made in the immediate future. The market for imported cuttings is practically unchanged and prices are only nominal. Now that the spring season has arrived it is anticipated that the paper mills will be replenishing their depleted stocks, and the rag market should show signs of improvement in the near future.

Waste Paper

Demand for waste paper has slightly improved, especially for the lower grades. While prices are still inclined to fluctuate, a general advance may be expected when the buying movement expands rapidly enough. Old kraft has been fairly active and there is also a steadier demand for soft white shavings. In the opinion of close observers of the waste paper trade, better days are coming soon.

Twine

The position of the twine market continues strong, and the trade is favorably affected by the increased consumption of wrapping paper for spring and Easter requirements. Prices are holding up very well, and indications point to a highly profitable year for the industry.

March Proves Satisfactory Month in Boston

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., March 29, 1926.—Though there was a slight falling off in orders during the last week it is the general concensus that March will go ahead of the same month a year ago and will add materially toward making the first quarter of 1926 a fairly good year for this section. Despite rather unseasonable spring weather general business seems to move along satisfactorily.

Easter business has proved a valuable drawing card for this mouth, both fine and coarse divisions sharing in the trade. In fact all branches of the trade report having a "finger in the pie," due chiefly to improved conditions in allied industries. The fine paper merchants are busy with the printers' orders which have been flowing regularly for some time. Stationers' demands are keeping these houses busy and commercial papers are in great demand. Prices remain the same with little likelihood of any change.

With seasonal activities at their peak, wrappings and other heavy paper find great demand among mercantile houses and the call is heavy. Textile centers appear to be picking up and with better conditions in these quarters the coarse paper division notices an improved demand.

This same general business improvement is helping the box board men to some extent, one telling the PAPER TRADE JOURNAL correspondent this week, that the past two weeks had been the best he has enjoyed in a year. He referred particularly to the orders obtained from candy and clothing houses. Some paper box plants report "rush orders."

The paper stock division still is dormant, the mills not yet having arrived at the brisk buying point. They still have stock on hand and when they come into the market it usually is for some special line with which they are not supplied.

Fairmount Plant Destroyed by Fire

FAIRMOUNT, Ind., March 23, 1926.—The factory of the Superior Paper Products Company, manufacturers of paper products, was destroyed today. The loss, which is estimated at $60,000, is partially covered by insurance.

Lowering Costs of Bag Making
by more efficient methods

Our two color printer is the last word in paper bag development and can be applied to any "Fischer Machine."
FISCHER MACHINES make paper bag making pay bigger profits. A marvel of speed and has the ability to stand up in hard service, day in and day out for years.
Every machine made with the greatest care and accuracy and tested before shipping and fully guaranteed.
It pastes, prints the trade-mark, counts and makes the complete bag from the roll. We have some facts and figures as well as the recommendations of users to show you.

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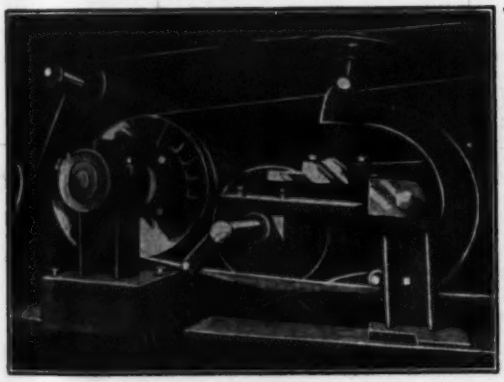

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BLUE RIDGE FIBER
Bleached Soda Pulp

Manufactured and sold by
COLUMBIAN PAPER COMPANY
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MENDELSON BROS.
Paper Stock Co.

Paper Manufacturers' Supplies

910 So. Michigan Ave. Chicago, Ill.

Miscellaneous Markets

Office of THE PAPER TRADE JOURNAL,
Wednesday, March 31, 1926.

Trading in the local chemical market during the past week continued along routine lines, with spot sales limited to small purchases. Contract withdrawals are still moving in good volume, however, and the manufacturers are experiencing a steady expansion in the demand for shipments. While it is said that there has been some shading on desirable contract business, prices are generally holding up to schedule, and no radical changes are anticipated for some time.

BLANC FIXE—Purchasers of blanc fixe are practically confining their orders at the present time to immediate needs and are not inclined to stock far in advance of actual requirements. Prices remain unchanged. The pulp is selling at from $60 to $64 per ton, in bulk, and the powder at from 3¼ to 4½ cents a pound, car lots, at works.

BLEACHING POWDER—Manufacturers report a heavy demand for bleaching powder and contract withdrawals are moving at an excellent pace. The tone of the market at present is very firm. Bleaching powder is quoted at from $2.00 to $2.40 per 100 pounds, in large drums, at works, according to quantity.

CAUSTIC SODA—An increased demand is being experienced for caustic soda and shipments on contract are expected to expand steadily during the next few months. Most of the plants are operating at full capacity to keep up with the consumption. Quotations on caustic soda range from $3.10 to $3.15 per 100 pounds, at works. Spot car lots are quoted at from $3.20 to $3.25 per 100 pounds.

CASEIN—While spot trading in the casein market was rather limited, there was a fair movement on contract orders booked previously. Prices on both imported and domestic casein rule very firm. Foreign casein is selling at from 14 to 14½ cents a pound, and domestic at from 13½ to 15 cents a pound, according to grade, all in bags.

CHINA CLAY.—Both domestic and imported china clay were in fair request and the recently quoted prices are being well maintained. Imported china clay is selling at from $13 to $22 a ton, ship side. Domestic washed clay is quoted at $8 a ton, at mine, and pulverized at $10 a ton.

CHLORINE.—Demand for chlorine continues heavy and prices are holding up very well. Shipments on contract are proceeding in a satisfactory manner. Chlorine is still quoted at 4 cents a pound, in tanks, or multi-unit cars, at works, on contract orders. The spot quotation remains around 4½ cents a pound.

ROSIN.—Not much improvement has been noted in the rosin market and prices are somewhat weaker, due to the generous amount of the product available at the present time. At the naval stores, the grades of rosin used by the paper mills are now quoted at from $11.25 to $14 per 280 pounds, ship side, in barrels.

SALT CAKE.—The tone of the salt cake market continues steady. Shipments on contract are moving in good volume and prices are being well maintaned. The spot demand is also fairly good while stocks are sufficient to meet the prevailing request. Salt cake is still selling at from $17 to $20 a ton, in bulk, at works.

SODA ASH.—Steadiness prevails in the soda ash market and prices rule firm. The demand for this product is increasing and manufacturers are dispatching larger shipments to consumers. Production is reported to be nearly at full capacity, although there is little possibility of any surplus accumulating at the present time. Contract quotations, in car lots, at works, per 100 pounds, remain as follows; In bulk, $1.25; in bags, $1.38; and in barrels, $1.63.

STARCH.—Paper makers starch continues in excellent demand, and consumption appears to be increasing. Production is being maintained in good volume and the recent advanced prices are holding up in a satisfactory manner. Special paper makers starch is selling at $3.32 per 100 pounds, in bags, and at $3.49 per 100 pounds, in barrles.

SULPHATE OF ALUMINA.— Keen competition is being experienced at present in the sulphate' of alumina market and prices are rather unsettled. The domestic product is moving steadily to consumers on contract. Sulphite of alumina is quoted at from $2 to $2.05 per 100 pounds, for the iron free, in bags at works, in car lots, and at from $1.40 to $1.45 for the commercial grades.

SULPHUR.—The demand for sulphur continues fairly active. Shipments against contract are moving in good volume and prices are practically unchanged. The quotation on the grade of sulphur used by the paper mills ranges from $14 to $15 a ton, in bulk, at mine, and at from $20 to $21 a ton, ship side.

TALC.—The talc market continues to maintain a strong position. The demand for this product is persistent and contract withdrawals are moving at a satisfactory pace. Prices remain practically unchanged. Talc is quoted at from $16 to $18 a ton, at eastern mines, according to grade.

Educational Talks Commended

A special tribute was paid to the Philadelphia Paper Trade Association by President Charles L. Kinsley of the Typothetae for the splendid educational campaign which the paper men provided for the associates in the printing industry early in the season. He complimented the paper men on the excellent series of talks which had been arranged under the direct supervision of George W. Ward, appointed by the Paper Trade Association to perfect plans for this special purpose. Mr. Ward secured the co-operation of prominent paper men in the manufacturing, distribution and advertising field of the paper industry, and with a schedule of ten lectures conducted the educational classes at the Elks Club in the early part of the winter for the instruction of the printers in the proper use of papers and the practical application of these in the various uses of press and type.

Strike With I. P. Co. Declared Closed

[FROM OUR REGULAR CORRESPONDENT]

ALBANY, N. Y., March 27, 1926.—After nearly five years, the six international unions that have been involved in the long strike with the International Paper Company have voted to terminate the strike and are now notifying all locals to that effect. By unanimous vote the strike was declared as having terminated on Saturday, March 20.

The unions involved in the strike with the International Paper Company were the International Brotherhood of Papermakers, The Pulp, Sulphite and Paper Mill Workers Union, Carpenters, Electricians, Machinists and Firemen.

Exports of Pulp From Finland Decrease

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., March 31, 1926.—Exports of pulp from Finland fell from 24,733 metric tons (metric ton = 2,205 pounds) during December, 1925, to 18,892 tons during January, 1926. While shipments of all clasess of pulp during January were smaller than in the preceding month, the loss was principally due to a reduction in exports of sulphite pulp, which fell from 16,412 tons to 11,411 tons. Exports of paper during the same month, on the other hand, increased from 17,630 tons to 20,160 tons. Over half of these shipments consisted of news print paper, which rose from 9,040 tons in December to 12,773 tons in January.

Certain-Teed Products Prosper

The Certain-teed Products Corporation in its report as of December 31, 1925, shows earnings of $8.32 per share on the common stock or more than twice the present dividend rate. The income after selling, administrative and general expenses and bank interest was $2,604,604, derived from gross operating profit after deducting repairs, maintenance and depreciation, $5,950,864. The net income carried to earned surplus amounted to $2,100,998. The surplus amounts to $1,489,779.